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CULTURAL RESOURCE INVENTORY AND EVALUATION

Of Selected Coal Mines and a Gold Mine near Lewistown, Montana

for

The Montana Department of State Lands
1625 - 11th Ave.
Helena, Montana 59601

by

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Report No. 92-2-87

April 1987

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ABSTRACT

Cultural resource inventory of 14 mine sites within the Lewistown Coal District was conducted for the Department of State Lands, Abandoned Mine Reclamation Program. The coal mine sites in Fergus County are: Sharp Mine (24FR627), Ottot and Baron Mines (24FR628), Willard Mine (24FR629), Dubois Section 34 and 35 Mine (24FR630), Frank MacDonald Mine (24FR631), Piper Mine (24FR632), Brodie and Apple Mines (24FR633), Phillips Mine (24FR634), Swanson Mine (24FR635), Cowen Mine (24FR636) and Company Mine (24FR637). The coal mines in Judith Basin County are the Saager Canyon Mine complex (24JT150) and the Waite Creek Mine (24JT151).

The single gold mine inventoried is the Gilt Edge Mine (24FR638). The mills and town associated with the mine were included in the inventory.

Table 1 provides a cross-reference for the names given to the mines by the Department of State Lands (DSL) and their historic names.

Table 1. DSL and historic names and Smithsonian numbers for mines.

DSL Designation	Historic Designation	Smithsonian Site Number
Skaggs Mine	Sharp Mine	24FR627
Dubois Mine (Section 27)	Ottot and Baron Mines	24FR628
Dubois Mine (Section 26)	Willard Mine	24FR629
Dubois Mine (Section 34 & 35)	Dubois (unknown historic name)	24FR630
Coppedge-Bursheim Mine	Frank MacDonald Mine	24FR631
Stewart Mine	Piper Mine	24FR632
Nesselhauf Mine	Brodie and Apple Mine	24FR633
Phillips Mine	Phillips Mine	24FR634
Swanson Mine	Swanson Mine	24FR635
Cowen (Section 17)	Cowen Mine	24FR636
Cowen (Section 9)	Company Mine	24FR637
Giltedge Mine	Giltedge Mine	24FR638
Olson Mine	Saager Canyon Mine Complex	24JT150
Dover Mine	Saager Canyon Mine Complex	24JT150
Keating Mine	Waite Creek Mine	24JT151

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*DSL shows this mine as being located in the SW1/4 Section 33, T14N R13E. No mine was located at this location. The Waite Creek Mine is the nearest mine to this location.

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INTRODUCTION

In November of 1986 GCM Services, Inc. in Butte, Montana was contracted by the Montana Department of State Lands (DSL) to perform a cultural resource inventory and evaluation of selected abandoned coal and hardrock mines in Montana.

In the interest of public safety and health the DSL, as part of its abandoned mines reclamation project, plans to seal mine adits, remove any unsafe structures and either remove or reclaim tailings and coal spoil dumps.

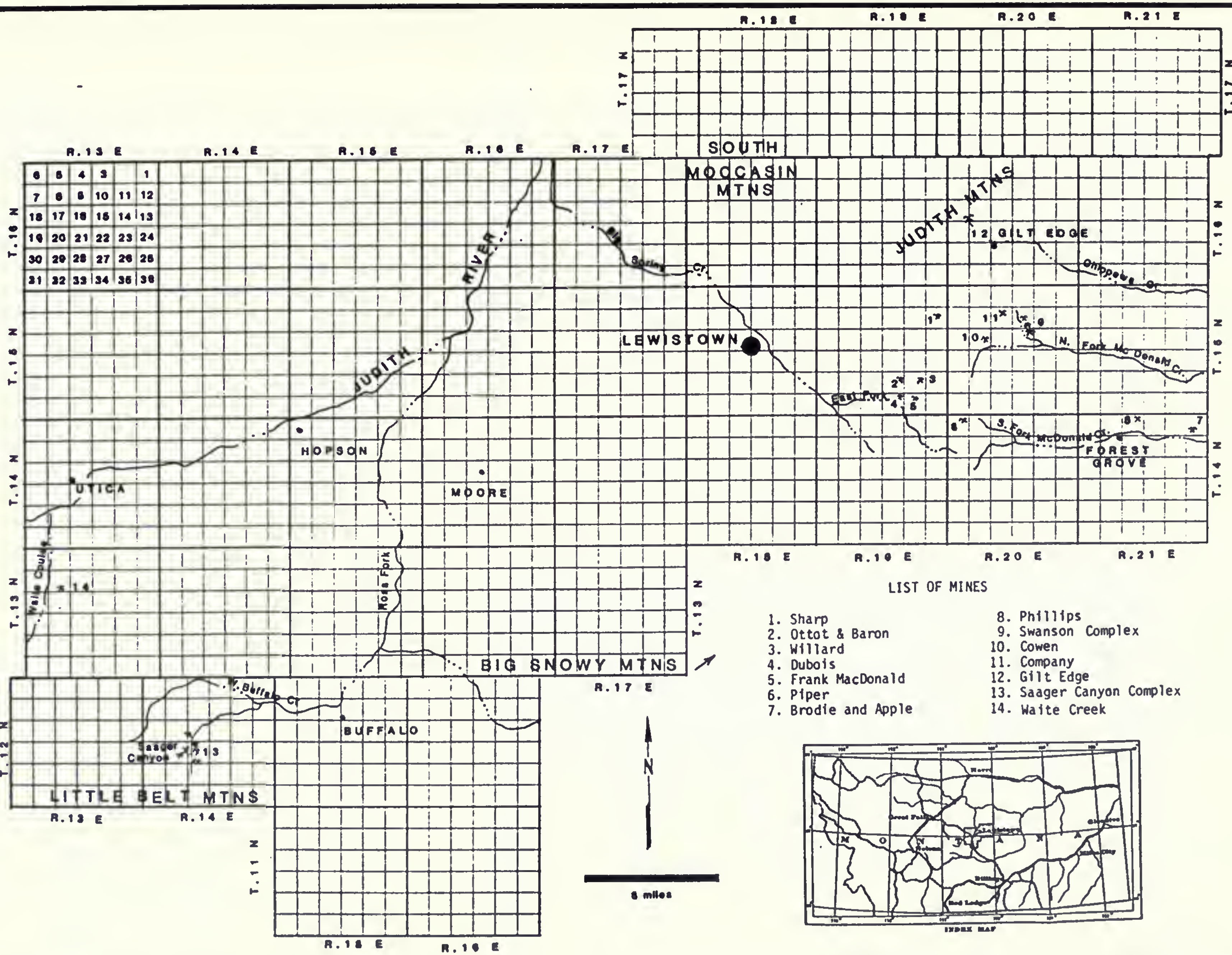
This report presents the results of the inventory of selected mine sites in the Lewistown Coal Field (Figure 1). The following report describes the physical setting, historic background and present state of the Sharp Mine (24FR627), Ottot and Baron Mine (24FR628), Willard Mine (24FR629), Dubois Sections 34 and 35 (24FR630), Frank MacDonald Mine (24FR631), Piper Mine (24FR632), Brodie and Apple Mines (24FR633), Phillips Mines (24FR634), Swanson Mine 24FR635), Cowen Mine (24FR636), Company Mine (24FR637), Gilt Edge Mine (24FR638), Saager Canyon Mine Complex (24JT150), and the Waite Creek Mine (24JT151).

Field investigations were conducted in December 1986 and March 1987 by Gene Munson. The project maps were prepared by Jim Duran and the report was edited by Paul Anderson.

A site inventory form for each mine site makes up Appendix A. For each site there is detailed information on the existing features, a historic discussion and an evaluation of the site in terms of its contribution to the history of central Montana. Maps and photographs supplement the written material. These site forms remain on file at the state repositories at the State Historic Preservation Office, Helena, and the Department of Anthropology, University of Montana, Missoula.

All field notes, photographs and supportive information resulting from the cultural resource fieldwork will be maintained at the office of GCM Services, Inc., Butte, Montana.

Table 2 provides the legal locations of the sites.



LIST OF MINES

1. Sharp
2. Ottot & Baron
3. Willard
4. Dubois
5. Frank MacDonald
6. Piper
7. Brodie and Apple
8. Phillips
9. Swanson Complex
10. Cowen
11. Company
12. Gilt Edge
13. Saager Canyon Complex
14. Waite Creek

Figure 1. Map showing locations of mines inventoried.

Table 2. Legal descriptions of project mines.*

Sharp Mine - 24FR627	T15N R19E W1/2 E1/2 SW1/4 Section 12
Ottot and Baron Mines - 24FR628	T15N R19E SE1/4 Section 27
Willard Mine - 24FR629	T15N R19E T15N R19E NW1/4 SE1/4 Section 26 SW1/4 NE1/4 Section 26
Dubois Section 34 & 35 Mine - 24FR630	T15N R19E NE1/4 Section 34 NW1/4 Section 35
Frank McDonald Mine - 24FR631	T15N R19E center of NE1/4 SW1/4 Section 35
Piper Mine - 24FR632	T14N R20E SE1/4 NE1/4 Section 6
Brodie and Apple Mines - 24FR633	T14N R21E SW1/4 Section 1
Phillips Mine - 24FR634	T14N R21E NE1/4 Section 4
Swanson Mine - 24FR635	T15N R20E SE1/4 Section 10 NE1/4 Section 15
Cowen Mine - 24FR636	T15N R20E NE1/4 NE1/4 Section 17
Company Mine - 24FR637	T15N R20E NE1/4 Section 9 NW1/4 Section 9
Giltedge Mine - 24FR638, mills and town	T16N R20E SE1/4 Section 20 SW1/4 Section 21 NW1/4 Section 28 SW1/4 Section 17 SE1/4 Section 18
Saager Canyon Mine Complex - 24JT150	T12N R14E S1/2 SW1/4 Section 16 NE1/4 Section 20 SE1/4 Section 20 NW1/4 Section 21 NE1/4 Section 21
Waite Creek Mine - 24JT151	T13N R18E NE1/4 NW1/4 Section 8

*For a more detailed description see site forms in Appendix A.

METHODOLOGY

Prior to the initiation of fieldwork the state site files at the University of Montana, Montana Historical Society's Historic Preservation Office files, and the Historic Sites Compendium (Montana Fish and Game Commission 1975) were searched for previously recorded sites in the area. The Government Land Office records at the Bureau of Land Management's records division in Billings, Montana was consulted for relevant GLO plat maps, historic survey plat maps and historical indices showing site ownership and historical features in the vicinity.

The site areas were carefully examined through a pedestrian inventory following standard archeological survey procedures. These pedestrian surveys are designed to provide the most complete coverage of an area possible. Undisturbed areas were systematically examined for possible prehistoric activities.

The survey is designed to meet all legal requirements of the National Historic Preservation Act 1980 Amendments. The information provides all necessary data to allow agency review for National Register of Historic Places (NRHP) eligibility and a determination of the effects of the proposed action.

All sites located are recorded on standard site forms and are assigned a site number by the state site files office at the University of Montana under the trinomial system of the Smithsonian Institution. Each site is examined, structures measured and a sketch map drawn showing the location of artifacts, cultural features and/or structures and their relationship to natural features within the site area.

Each site is photographed in black and white negative and color positive film. On historic sites all features and structures are photographed to show significant aspects in detail.

PHYSICAL SETTING

Except for the eastern edge, the Lewistown coal field, is in a geographic region known as the Judith Basin located in Judith Basin and Fergus Counties, central Montana. Judith Basin is ringed by mountains: the Moccasins to the north, Judiths to the northeast, Little Belts to the southwest, Highwoods to the northwest, and the Big Snowy Mountains to the southeast. It is about 50 miles east/west by 30 miles north/south.

Judith Basin is drained by streams that flow to the north into the Missouri River. The major drainage is the Judith River with headwaters that begin in the Little Belt Mountains. Ross Fork and Big Spring Creek are two important tributaries of the Judith River (Figure 1).

Vegetation in the mountains is lodgepole pine - Douglas fir forest and eastern Montana ponderosa pine forest. Around the mountain margins is foothill grassland and the interior of the basin is made up of Teton River - Judith Basin grassland (Payne 1973).

Most of the basin is covered with a Argiborolls-calciborolls soil and a Haploborolls-Calciborolls-argiborolls which are stable deep loams (Montagne et al. 1982).

GEOLOGY OF THE LEWISTOWN COAL FIELD

Around 60 million years ago at the close of the Mesozoic period central Montana was in a near-desert, interior-drainage environment. There were small but numerous basins that contained ample amounts of water for plants to flourish. These basins may have been swamps fed by streams or margins around lakes or both. In time lacustrine and floodplain deposits rich in iron and sulphate covered the deposits of peat. In places before the peat beds were covered they were dissected by small water channels. For another 20-30 million years sediment accumulated on top of the peat - compressing and heating - turning peat into coal. For another 20 million or so years the Big Snowy, Judith, Mocassin and Little Belt Mountains were uplifted. Further compressing and heating the coal that lies on their margins turning it into sub-bituminous to bituminous with calorific values of 9,000 to over 12,000 British thermal units. While the peat was turning into a two foot to six foot coal seam water from the sediments in contact with the coal percolated through it depositing molecules of iron and sulphate. The iron and sulphate molecules combined resulting in a coal heavily laden with iron phyrites.

The combination of uplift and erosion due to the mountain orogeny exposed outcrops of this Morrison formation coal around the margins of the mountains. Even though the coal seam is relatively thin, discontinuous, and high in sulphur, it was so readily accessible that at the turn of this century a small mine selling locally was fairly profitable. Probably the coal's high sulphur content, more than any one factor, shorten the length of coal production in the Lewistown coal field. As soon as the low sulphur Roundup coal was readily available most local consumers switched to it (Calvert 1909; Silverman and Harris 1967; Sholes 1987; Perry 1962, and Zillick 1985).

HISTORIC BACKGROUND OF THE LEWISTOWN COAL FIELD AND GOLD MINING IN THE JUDITH MOUNTAINS

Development of the coal seams around Lewistown began around the turn of the century. Numerous small "wagon mines" grew up in the area to supply Lewistown and surrounding communities and rural areas. Coal was easily mined even though the coal was not continuous throughout the area but instead occurred in limited districts with unproductive areas in between. Within the productive areas, however, the coal was easily reached. Water and gas were generally not problems. None of the mines needed fans for ventilation and none reported any trouble with gas. The coal seams were generally on a slight incline which made it easy to haul coal in the mines with a mule or, more commonly, by pushing by hand (Calvert 1909).

Within a few years from the beginning development of the area, these small mines furnished all the coal needs for Lewistown and surrounding communities (e.g., Buffalo, Hopson, Gilt Edge, Forest Grove). By the spring of 1904 the Montana or "Jawbone" Railroad had reached Lewistown buying much of the coal. Coal was sold directly to the railroad by the Spring Creek mine located a few miles southwest of Lewistown and the Brodie Mine near Forest Grove. The mine was the area's one large-scale commercial operations. It employed as many as 40 men and in 1904 produced about 40,000 tons of coal (Calvert 1909; Rowe 1905; 1907; 1909).

There were a few other moderate size commercial mines such as the Brew, Parson, Sharp, and Black Diamond which supplied much of Lewistown's winter fuel needs;

the Mace mine which supplied much of the coal to the Kendall mining district; and the Company mines which supplied fuel to the Gold Reef Mining and Milling Company properties at Gilt Edge (Calvert 1909).

Most of the remaining mines in the area were small-scale operations employing at most, two or three men during fall and winter and which produced a few hundred tons annually. However, when combined, the area's numerous mines created a small boom in coal production in 1909-1910 but then production slumped to 23,000 tons by 1914. A second small boom occurred from 1916 to 1920 when Fergus County produced from a quarter to a third of a million tons. Following this brief period of expansion coal production saw a steady decline during the 1920s and 1930s as Roundup coal which was lower in sulphur and had less clinker began to compete. Gradually fuel oil, natural gas and electric heat replaced coal as the main domestic fuel forcing the closure of the area's mines one by one until the last mine shutting down in the 1970 (Calvert 1909; Deal and McDonald, editors 1976; Swanson 1987).

Due to its geographic position, the Lewistown coal field was never a large commercial coal producing area. The lack of any local large industries (other than mining) reduced demand for industrial coal. The principal disadvantage of the Lewistown area was the fact that it was not directly on the route of either of the major east/west railroad lines as were the Bull Mountain field and the Belt/Stockett/Sand Coulee area. This meant that coal could not be economically shipped to distant markets nor was there the large demand for fuel by the railroad itself, although the Spring Creek mine did sell about 125 tons a day to the Montana Railroad. For the most part, the Lewistown mines supplied the local market for domestic fuel. As was true elsewhere throughout Montana during the first half of the Twentieth Century, this was a vital factor in the region's settlement and growth as an important agricultural center.

The discovery of gold in the Judith Mountains came relatively late in the history of the development of Montana, almost twenty years after the gold rush in southwest Montana. In 1880 placer gold was found in Alpine Gulch near the town of Maiden. By this time central Montana was being settled by ranchers and Lewistown was beginning to be a center of trade. Fergus County was established in 1886 with Lewistown being the county seat (Zellick 1980; Deal and McDonald, editors 1976).

The first stamp mill was built in 1882 at the Collan Mine, about two miles from Maiden. It went broke in six months, never to reopen. With the introduction of the cyanide process in 1893 the extraction of gold from low grade ores became feasible and allowed the Gilt Edge Mine to become a major producer. Other mines soon adopted this process, and mining flourished (Zellick 1980; Robertson 1950).

As the mines became deeper the character of the ores changed. Milling methods that were once successful did not work as well. Higher costs of processing the ores and the exhaustion of the higher grade ores caused most of the mines to suspend operation. Large mines such as the one at Gilt Edge were shut down by 1916. In 1933 the price of gold increased resulting in a resumption of some gold mining. Government order L-208 in 1943 stopped all gold mining during the war years with only limited mining resuming after the war (Robertson 1950).

HISTORIES OF THE STUDY GROUP MINES

The coal mines examined in this report are within the context of coal mining in the Judith Basin and the area immediately to the east. The histories of these mines are illustrative of a period when coal was the dominant type of fuel used in the home as well as in industry. It also represents a time when the majority of the mines were family owned and operated. The histories of these mines also show that it was not the depletion of the coal resource that caused the decline and eventual abandoment of coal mining in the Judith Basin but competition from other coal (i.e., coal from Roundup, Montana) and eventually other kinds of fuels (i.e., natural gas and oil).

The gold mine examined in this report relied upon the relatively inexpensive and nearby coal to fuel its mill and process part of its ore. In this way the mine fits into the context of the local coal industry.

Site Narratives

Site: Sharp Mine (24FR627)

Historical information and evaluation: William and Alex Sharp operated the mines from around 1907 until the 1920s (Calvert 1909; Tuss 1986). In 1914 the Sharp mine supplied coal during the construction of the Burlington Northern Railroad grade. Either Mine 2 or Mine 3 (or both) connects with the Peter Kovacich mine to the west. This was not planned and there was some concern expressed by Peter Kovacich when he discovered that the Sharp Mine extended into the coal that he owned. However, the connecting of the mines had a positive result since it greatly helped the circulation of air in both mines. Sharps discontinued mining at the site shortly after the mines were connected (Tuss 1986).

Site: Ottot and Baron Mine (24FR628)

Historical information and evaluation: All that could be found about these mines is that George Ottot and Charley Baron operated them around 1920 (Tuss 1986). The locations of records that were checked for further information on the mines are: 1) Government Land Office Records, Bureau of Land Management, Billings, Montana; 2) Fergus County Courthouse, Lewistown, Montana; and 3) Carnegie Public Library, Lewistown, Montana.

Site: Willard Mine (24FR629)

Historical information and evaluation: Little is known about the mines other than they were operated by John H. Willard at the turn of this century (Tuss 1986). The locations of records that were checked for further information on the mines are: 1) Government Land Office Records, Bureau of Land Management, Billings, Montana; 2) Fergus County Counthouse, Lewistown, Montana; 3) Carnegie Public Library, Lewistown, Montana; 4) Montana Bureau of Mines and Geology, Butte, Montana; and 5) the Montana School of Mines and Technology Library, Butte, Montana.

Site: Dubois Mine (24FR630)

Historical information and evaluation: No historical information could be found on the mines. Innumerable local informants were interviewed. The locations of records that were checked for information on the mines are: 1) Government Land Office Records, Bureau of Land Management, Billings, Montana; 2) Fergus County Courthouse, Lewistown, Montana; 3) Carnegie Public Library, Lewistown, Montana; 4) Montana Bureau of Mines and Geology, Butte, Montana; and 5) the Montana School of Mines and Technology Library, Butte, Montana.

Site: Frank McDonald Mine (24FR631)

Historical information and evaluation: The mine was begun by Archie J. Motheral. Since the coal was federally owned, Motheral first filed for a prospecting permit (GLO permit serial No. 045557) in April of 1921. On November 24, 1923 a coal lease was awarded to Mr. Motheral (GLO serial No. Billings - 022599). Frank F. McDonald, on February 11, 1926, was awarded the lease by paying the government $313.61 of back royality payments. Frank McDonald continued to operate the mine until 1934. It was a small operation producing about 550 tons of coal per year (GLO Records n.d.; Tuss 1986).

Site: Piper Mine (24FR632)

Historical information and evaluation: By 1907 this small wagon mine with a 34 in. thick coal seam had a slope driven a distance of 315 ft down dip, which was about 10°. Coal was taken from the mine only during the winter (Calvert 1909). It continued to be worked intermittently until the early 1930s. Frank Matejcek operated the mine in the late teens and early 1920s. He sold the land to Art Silson who operated the mine until the early 1930s. During this period, Jim Truback, a bachelor, who lived at the mine did most of the actual mining. Like most of the mines in the area the drifts off of the main tunnel were quite low, i.e., the thickness of the coal seams (Drinkard 1976; Tuss 1986).

Site: Brodie and Apple Mine (24FR633)

Historical information and evaluation: Mine 1 was on Tom L. Apple's property and mines 2 and 3 were on federal land. Apple started the mines around 1920 (Robert Johnson 1986*). On October 19, 1921, John F. Brodie filed for a coal prospecting permit (GLO Serial No. Billings - #022761) on the government land in which mine 2 was located (GLO Records n.d.). Mine 1 became known as the Apple Mine and Mine 2 was called the Brodie Mine.

A railroad spur from the Chicago, Milwaukee, St. Paul and Pacific Railroad was brought to the Brodie Mine. The spur was about one-half of a mile long. It went up the face of the bluff to where the ground begins to slope quite steeply. From the mine adit down to railroad spur a double mine car track was laid. This track was about 100 m in length and dropped in elevation some 40 m. One mine car was placed on one track and another on the other track. They were connected together by a cable that ran through two sheeves that were anchored at the head of the tracks. [Each cable may have been connected to a winch and the winches were placed in compound with each other. Informants Eike and Johnson could not remember for sure how the mechanism worked.] What was unique about this double track system was that the loaded mine car would hoist up the empty mine car and no auxiliary power was needed.

The Brodie Mine employed about eight to 10 men. A mule was used to pull the coal cars out of the mine until about 1930 (Johnson 1987). The mule was then replaced by a hoist powered by a Dodge engine (Lerwill 1934).

In 1928 Tom Apple began mining at the Brodie Mine. Apple obtained GLO licence, Billings - #034102 to mine the coal and opened up mine adit 3. By 1934 coal from the Roundup mine became readily available for the local market. The Roundup coal had far less sulphur, less clinker and was cheaper. It sold for $4.50 or less a ton. Mr. Apple stopped mining at the Brodie mine in 1934 (GLO Records; Eike 1986; Johnson 1987). The coal spoil dump in front of the Brodie mine burned around 1939 (Johnson 1987).

There is far less information available on the Apple mine. Tom Apple mined coal at the mine during the 1920s (Johnson 1987). Currently, at the base of

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*Robert Johnson is the son-in-law of Tom L. Apple and worked for a year (1929) in the Brodie Mine.

the bluff adjacent to the road, there is a coal spoil dump and remains of a tipple. From the tipple up the mine, a distance of 180 m and an elevation change of 80 m, there is a 1 m wide area cleared of rocks with an occasional piece of a board or plank. This is the remains of a chute which was used to get the coal off the bluff rather than the double track/two mine car system used at the Brodie Mine (Tuss 1986).

Site: Phillips Mine (24FR634)

Historical information and evaluation: The following information about the mine was provided by Austin Eike and supplemented by information from the GLO records. Eike lived all his life life about 1/4 of a mile from the mine and he is currently in his 70's.

The mine was always a one man operation. The succession of people who mined it are Milton Phillips, Lawrence Salla, and William Flanigan. The buildings across from the mine were built by Milton Phillips in the late 1920s (Eike 1986).

The coal at the Phillips mine was leased to Milton Phillips by the U.S. Department of Interior, General Land Office from April 14, 1926 to June 17, 1932 under lease number, Billings - #023162. The mine was operated for a short period of time by John Labor who applied for a lease December 16, 1932 [Eike,however, said he could not remember John Labor actually working the mine.] The lease was approved June 13, 1933 (serial number Billings - #034129). On August 8, 1933 a lease with the same serial number (Billings - #034129) was issued to William Flanigan. Since Flanigan did not pay royalities on the coal that he mined from September 1933 to Febraury 1934 the lease was terminated. The letter of lease termination was approved April 6, 1934 (GLO Records n.d.).

On September 17, 1934 a cancelled lease inspection was made by R.H. Allport. He reported that a flood had removed the wagon scale and had done some damage to the tipple. At this time Flanigan was repairing the tipple and was appealing for the Land Office to reopen his case. Final rejection of his request to have his lease reinstated was May 11, 1935 (GLO Records n.d.)

Site: Swanson Mine Complex (24FR635)

Historical information and evaluation: All of these mines were small wagon mines which employed one to four men (generally, one to two miners). The coal in Section 10 is owned by the federal government and the records at the Bureau of Land Management, Billings, for these mines are fairly complete. The following discusses each of the mines individually. The mine numbers used below are based on those used on the attached sketch map of the mine locations.

Mine 1: This mine and the other two mines in Section 10 are known locally as the Swanson Mines. William Swanson Sr. owned and operated them. Mine 1 was mined from 1928 to 1930 under GLO prospecting permit, Billings - #029447. The mine extended about 175 ft back into the hillside. Swanson employed one man in which he paid $2.00 per ton of coal. The coal sold for $4.00 per ton at the mine. A steel track of eight pound steel and eighteen inch gauge was

used to haul the coal with a 800 pound car to a small tipple. Since the coal seam was quite level it was possible to push the car by hand out of the mine. The coal seam was about 3 ft thick. During the winter months coal production peaked around 90 tons per month with yearly averages of around 30 tons (GLO Records n.d.; Swanson 1987).

Mine 2: Mine 2 was begun in 1930 under GLO prospecting permit, Billings #029447- the coal seam was poorly developed. The mine extended about 130 ft back into the hillside. It was abandoned in 1931 (GLO Records n.d.).

Mine 3: This mine was begun in 1933 under GLO prospecting permit, Billings - 034324. In 1938 GLO coal lease, Billings - #037867 was issued for the mine. The lease was held until 1970. Coal production actually stopped in 1966. Apparently, this is the last coal mine to operate in Fergus County. During the last years only a few tons per year were mined. Most of the coal was for personal use along with small sales to a few local ranchers.

The mine extended about 1300 ft back into the hillside. There was one air shaft. An 800 pound coal car was used to haul the coal out of the mine. Rarely were draft animals used to pull the car, since it was usually pushed out by hand. Several years ago, William Swanson, Jr. collapsed the mine openings at Mines 1, 2 and 3 (Swanson 1987; GLO Records n.d.).

Mine 4: Joe Plovanich, Sr. operated this mine from 1930 to 1937. It remained through its life span as a small-scale operation (Swanson 1987).

Mine 5: This mine was started in 1912 by John Sharp. At the same time his brothers, Alex and William started a coal mine 10 miles to the west (24FR627). John Sharps mine was opened for sales to the Great Northern Railroad which was constructing a railroad a few miles to the south. The railroad was to run from Lewistown to Winnett but was never completed. The mine probably only operated a year or two (Swanson 1987).

Mine 6: This mine is known as the Smith Mine after Clarence Smith who owned the mine and the property it was located on. William Swanson, Jr. generally operated the mine and employed up to four people. The mine opened in 1938 and was shut down in 1963. It extended 1300 ft back into the hillside and had one ventilation shaft. A cable hoist was used to pull the coal out of the mine and up to the tipple. The mine averaged about 100 tons per year until the last years of operation when only a few tons per year were sold (Swanson 1987).

Site: Cowen (24FR636)

Historical information and evaluation: The coal at the mines in Section 17 is owned by the federal government.

The mines were owned and operated by two brothers, Bill and Hall Cowen. Later Hall bought Bill's share of the mines which were small wagon mines employing two to three workers at the most (Koza 1987). Originally the mines were opened in 1912 to provide coal for the Great Northern Railroad. However, the branch line that was to run from Lewistown to Winnett, Montana was never completed (Deal and McDonald, editors 1976).

The mines, at the most, went 1500 feet back into the hillside . Vent shafts were used to help circulate air into the mines. On top of the vent shafts a tall wooden box was constructed which acted as a chimney to help draw the air out of the mine. This system worked well as the mines had excellent air circulation. Of the three types of draft animals (i.e, mule, horse and pony) used to pull the mine carts out of the mine, Mr. Koza (1987), a miner at the Cowen Mines, noted that at the Cowen mines the pony was preferred.

The mines operated until the end of the 1930s.

Site: Company Mine (24FR637)

Historical information and evaluation: On November 16, 1903 a coal entry patent (Patent No. 2042) for the SW1/4 NE/14 of Section 9 was issued to William H. Pratt (GLO Records n.d.). It is probable that Pratt did some coal mining at the mines currently located in that part of Section 9. In 1907, the mining activity in the NW1/4 NE1/4 Section 9 was being carried out by Shipley and Kemp who had a contract to supply coal to the Gold Reef Mining and Milling Company. The Gold Reef Mining and Milling Company were at that time operating the gold and silver mine and cyanide plant about a mile northwest of Giltedge (Calvert 1909). The mine was called the "Company" after the Gold Reef Mining and Milling Company (see also site number 24FR638 Gilt Edge). In 1907 a slope had been driven 400 ft. Since the formation dipped at 17° down from the adit a winch was used to haul the mine cars out of the mine. The coal bed was 36 inches thick with a 1 inch clay parting at 8 inches above the bottom of the bed (Calvert 1909). During the 1920s Lewis Scarborough operated one of the mines at the site (Tuss 1987). Since the coal in Section 9 is owned by the federal government the government records were searched for information. Unfortunately, the files for Section 9 have been destroyed (Porenta 1987).

Site: Saager Canyon Mine Complex (24JT150)

Historical information and evaluation: Mining at the Saager Canyon Coal Mine complex started around 1900 and continued intermittently until the 1940s (Calvert 1908; Albert Dover 1987; Kuffler 1987; Bloom 1987; McKinlay 1987). As a result of this coal mining activity Saager Canyon became known locally as Coal Mine Coulee.

The mines were small wagon mines selling coal to the local residents in the Buffalo community, to the railroad and to the local farmers for fuel for their

stream tractors. The majority of the coal sales to the railroad occurred before 1920. With the introduction of stream tractors in the 1920s there was a new surge of coal mining activity (Albert Dover 1987).

The coal seam was generally around 30 inches thick but it was fairly uneven in thickness and not continuous which made mining difficult. It also had a tendency to pinch out. The mining technique was to have a main tunnel which was 4 ft. to 6 ft. high with side tunnels leading off of it. The side tunnels were the thickness of the coal seam so the miner had to be on his side while digging. The coal cars were pushed out by hand to the tipple. The mines at a maximum extended around 600 ft. into the hillside. The coal sold for $2.75 per ton unsorted and $3.00 per ton sorted (Albert Dover 1987; Bloom 1987).

The mines were generally named after the person who was currently mining at them. Over a period of several years an ore mine may have had several different operators resulting in the mine's having several different names. The informants interviewed referred to the mines by the names of people that they could remember who worked at them or simply by location in the canyon. To add to the confusion of who mined at what mine is the factor that many of the local people would come and mine their winter's supply of coal (Colin Dover 1987). The following names given to the mines come from interviews with local informants, Calvert's (1909) publication on the Lewistown coal field, and coal mine records at the Bureau of Land Management records in Billings.

Hollenbeck Mines - The Ben Hollenbeck mines are located on the west and east side of Saager Canyon near its mouth in the SW1/4 of Section 16. Hollenbeck and Shrewsbury at one time jointly owned the land in which the mines were located. Hollenback probably was not the one who started the mines. They date to some time before 1912. From around 1912 to around 1920 they were shut down. Around 1920 Hollenbeck purchased two stream tractors. He reopened the mines and employed a miner to mine coal for his tractors in addition to selling coal to other local customers. There was a log cabin at the mine for the miner to live in. During the 1930s the Shrewsbury's who lived just north of the mine got coal from it for their own use (Albert Dover 1987; Kuffler 1987).

Williams Mine - The Williams mine is located on the west side of Saager Canyon in the NE1/4 NE1/4 Section 21. It is .3 km southwest of the Hollenbeck mine. B.B. Williams started the mine in the fall of 1906 making it one of the first mines in Saager Canyon. Calvert (1909) reported that in 1907 the entry was 165 ft into the hillside with a 30 in. coal seam.

Bloom Mine - The Bloom Mine is about 100 m southwest of the Williams Mine. John Olson, whose property the mine was on at that time, may have started it. The Bloom family were the last to mine it and were responsible for most of its development. They set up a tipple at adits 1 and 2 (see sketch map). It was fairly elaborate having several screens for size grading of the coal. They also built two houses near the tipple. The Blooms begain mining in 1932 and stopped mining in the early 1940s. This is the last mine to operate in Saager Canyon. After the mine closed, Albert Dover, who bought the property on which the mines are located, moved one of the houses and tore down the other house and tipple for lumber (Bloom 1987; Albert Dover 1987).

Chris Olson Mine - The Chris Olson mine is located on the west side of Saager Canyon in the NW1/4 SE1/4 of Section 20. It was mined by Chris Olson around the 1920s or before. It was a small mine that primarily provide coal for the Olson families (Albert Dover 1987).

Saager Canyon Mine - This mine is located on the east side of Saager Canyon in the SW1/4 SW1/4 Section 21. This mine and the Williams Mine are two of the first mines in Saager Canyon. It was opened in the fall of 1906. Since the land in which the mine is located was unsubdivided, Calvert (1909) guessed that the mine was located in the NW1/4 NW1/4 of Section 28. He was fairly close since the mine is located just a few meters north of Section 28. The mine was owned by J. F. Lester, J. D. Kipe, E. E. Pearl, and William Gordon. In 1907 when Calvert (1909) visited the mine there was a drift of 85 feet in length and the coal seam was 4 ft. thick without a parting. Since the formation at the mine dips at 4° to the south, the entry extended upgrade (Calvert 1909).

Bachelor Mine - This mine is located on the east side of Saager Canyon about 450 m north of the Saager Canyon mine. Albert Dover (1987) could not remember the names of the two bachelors who mined it. They lived in a small cabin below the mine. This mine operated around the 1920s.

John Olson Mine - This mine is located on the east side of Saager Canyon in a steep sided ravine. Based on the U.S.G.S. Martin Coulee, Mont. 7.5 min quadrangle map, the mine is in SW1/4, SW1/4, NE1/4 of Section 21. The government records show the mine as in the NE1/4 NE1/4 SW1/4 of Section 21. There is about 75 m descrepency. John Olson applied for a government coal lease in July of 1922 and received lease number Lewistown 046065 in January of 1924. The lease was for the SE1/4 NW1/4 and the NE1/4 SW1/4 Section 20. It was cancelled in August of 1926. From 1923 to 1925 a total of 753-3/4 tons of coal was mined (GLO Records n.d.).

During the 1920s and 1930s Lester and Oliver Crabtree and Nick Knoll mined at the mine. Of the mines in Saager Canyon this mine probably produced the most coal (Bloom 1987; Albert Dover 1987).

No Name Mines - In the E1/2 E1/2 NW1/4 of Section 21 on the east side of Saager Canyon are five adits. No specific information could be found on these mines. Calvert (1909) on Plate VII shows a prospect located in this area. A road up the face of the canyon was cut to adits 1, 2 and 3 (see sketch map). And at adit 2 there is a fair amount of coal spoil implying that some coal was hauled from the mine.

Site: Waite Creek Mine (24JT151)

Historical information and evaluation: The mine was operated around 1900. However, none of the local informants could remember the name of the person who operated the mine. Because of this mine and coal outcroppings along the bluffs above Waite Creek, the long-time residents around Utica referred to the creek as Coal Bank Coulee. This is one of two coal bank coulees in the area. The other is northwest of Utica and is still referred to by this name (Raymond Swanz 1987; Tom Swanz 1987; Taurman 1987).

The local histories (Waite 1976; Taurman, editor 1968) and the records at the Bureau of Land Management in Billings, Montana were checked for further information but nothing was found.

Site: Gilt Edge (24FR638)

Historical information and evaluation: In 1884-1885 Wilson, Anderson and Munson staked mining claims in the area which would become known as the Gilt Edge mining area. They sold the claims to Collins and Armington who, in 1892, constructed a small, primative cyanide mill to process the low grade ore. This mill was on the west edge of the town of Gilt Edge and about two km from the mine. The Ammon-Strivers Mining Company bought the property in 1893. They employed Professor W. B. Potter of St. Louis, Missouri, as a consulting engineer. He had the mill rebuilt but even though this rebuilt mill was an improvement over the original one it still was not very efficient. However, it was the first cyanide mill in the United States capable of handling 100 tons of ore a day (Robertson 1950). In the summer of 1896 the property was attached by lien holders (Weed and Pirsson 1898).

The Great Northern Mining and Development Company purchased the property in 1897. They hired E. W. King as their mining superintendent and under his direction the mine became profitable. Part of this was due to the construction in 1899 of a new, modern mill adjacent to the main mine adit. This location near the mine greatly reduced the cost of hauling the ore. The Gold Reef Mining Company bought the property in 1902. The mill originally had the capacity to handle 150 tons of ore a day. The Gold Reef Mining Company increased the mill's capacity to 350 tons of ore per day (Walsh and Oren 1910). Coal was used to fire the ovens for roasting the ore. The Gold Reef Mining Company got the coal from a mine six km to the south. The mine was named the "Company" after the Gold Reef Mining Company (Calvert 1909). Some of the ore could not be treated directly by the cyanide process and had to be roasted first. This ore was called "black" or "unoxidized" ore, whereas, the ore that did not need to be treated was called oxidized ore.

In 1909 J. H. Drake became the owner of the property. He leased it to the Gilt Edge Lease Mining Company which was owned by Caldwell Cooper, and Turnbull. Mining ceased in 1912. By this time there were over 2-1/2 miles of underground workings. Surface or strip mining of the mountain side also took place. Walsh and Orem (1910) reported that during the winter, mining activity was underground and during the summer it was on the surface.

From 1901 to 1912 the mine yielded over 65,000 ounces of gold and over 3,000 ounces of silver. The amount of gold recovered from the ore ranged from 70 cents to $12 ton (Robertson 1950).

In 1918, 8,200 tons of the tailings from the first mill were re-treated in a cyanide plant specially constructed for this purpose. This produced 528 ounces of gold and 74 ounces of silver (Robertson 1950).

The property lay idle until 1940 and 1941 when the Newmont Mining Corp. made an examination of the accessible workings and conducted several hundred feet of exploratory work along with some core drilling (Robertson 1950). The town of Gilt Edge came into existence in 1885 as the result of the discovery of gold at the Gilt Edge Mine. However, nearby Fort Maginnis and the influx of homesteaders into the surrounding area added to its growth. When Fort Maginnis (built in 1880) was abandoned in 1890 several of the buildings were moved to Gilt Edge (Deal and McDonald, ed. 1976).

In 1899 a plat of the townsite of Gilt Edge was surveyed and filed in the Fergus County Courthouse in Lewistown. Currently, the name of the town is spelled as one word - Giltedge. The lots measured 25 feet x 120 feet. Each full block had 28 lots. There were 43 blocks laid out.

Since the town of Gilt Edge depended almost entirely upon mining for revenue it waxed and waned along with the Gilt Edge mine. In 1901 Gilt Edge had a population of 350 people and was the distribution point for mail to post offices at Fort Maginnis, Roy, Fergus, Alpine, Edgewater, Maiden, Grass Range, Flatwillow, Musselshell, Baldwin, Milner and Junction (News Argus 1901). By 1916, the town was almost entirely deserted (Freeman 1916).-

The town was the shopping and medical center for the miners and millmen of the area. It had a hospital and four to five doctors. Traveling dentists would come to town periodically and set up shop for a few days. "There were six general stores (Caraway, Barnes, Mercantile, Garrens, Forster and Millinger), a candy store, two barbershops, bakery, two drugstores, clothing story, funeral parlor, four livery barns, butcher shop, six hotels and boarding house, a restaurant, two blacksmith shops, 13 saloons and one blind pig which had no license so sold whiskey through the back door" (Byerly and Byerly n.d. 46). Part of one building is all that remains of these businesses. The red light district consisted of two blocks of houses with extra girls that came in by stagecoach on pay days (Byerly and Byerly n.d. 46). One of the brothels, which was called the Palace, still stands (Feature 13).

The Gilt Edge cemetary is located on a hill immediately north of town.

SUMMARY

Coal mining in the Lewistown coal field began around the turn of this century and continued until 1966; the Swanson Mine being the last to close. Almost all of the mining took place before 1950 when natural gas came to Lewistown. Even before natural gas many people had already switched over to either coal from Roundup or oil for heat.

The majority of the mines were small wagon mines that were family owned and managed. Of the mines inventoried for this report only the Brodie Mine and the Company Mine were not family owned and managed.

Since all of the mines extracted coal from exposed seams, opening a mine required little expenditure of time and money. For this reason the mines did not extend any great distances back from the outcrop. It was easier to open a new mine than go to the expense of elaborate ventilation systems or coal transport systems. Because of this there are numerous adits along one coal outcrop. Generally, there was insufficient information available on the mines to be able to determine whether the adits connected to the same underground workings. Another consequence of the mines being family owned and operated, was that written records on them are generally lacking. At several of the mines the families have either moved away or the members of the family that knew anything about the mines have passed away.

The primary market for the coal was for household purposes. The local school districts also were a big customer for the coal. Of the mines inventoried only the Brodie Mine actively sold coal to the railroad. The Company Mine sold its coal exclusively to the gold mine at Gilt Edge until the gold mine shut down in 1915.

Coal mining played an important role in the development of Central Montana. It was a cheap fuel that was in plentiful supply. Besides meeting domestic needs, it supplied heat for schools and businesses; fueled ovens and steam plants at the gold mines; powered steam locomotives for the railroad, and steam tractors on the farms. For these reasons the coal mines inventoried were considered as meeting the requirements of Criterion A as set down by the National Register of Historic Places. However, at all of the mines so little remained of the physical structures (e.g., tipples) that are associated with coal mining that the historic identities of the sites have been sufficiently impaired that none were considered for listing on the NRHP.

The Gilt Edge gold mine, mills and town played an important role in the development of central Montana during the turn of this century. The mine employed a large number of workers who lived in Gilt Edge making it a sizeable community with schools, a hospital and a business district. The first mill was one of the first cyanide plants in the country and brought cyanide leach technology to the gold mines in central Montana. The site easily meets Criterion A in the NRHP. Unfortunately, very little survives of the physical characteristics that existed during the site's historic period. Almost nothing remains of the mills. Even though several buildings are still located at Gilt Edge they are all residential. Without the business district or schools the property's historic identity is lost. Neither the mine, mills or town are considered as eligible for listing on the NRHP.

Table 3. Summary of inventory data for the coal mines recorded on this project.

Site Name	Site Number	Dates of Operation	Major Historic Theme	Site Condition	Description and Comments
Sharp Mine	24FR627	1907-1920s	wagon mine opened up for a proposed railroad branch line and providing coal to Lewistown	only the coal spoil dumps and the footings for a tipple remain	The Sharp brothers opened the mine in anticipation that a railroad branch line would run nearby and the coal would be sold to fuel the locomotives. The railroad did not materialize, so they sold the coal to customers in Lewistown.
Ottot and Baron Mine	24FR628	around 1920	wagon mine to supply coal for Lewistown	only the coal spoil dumps remain	No information could be found on the mines except for the names of two people who mined at it.
Willard Mine	24FR629	around 1920	wagon mine to supply coal for Lewistown	only the coal spoil dumps and footings for a tipple remain	No information could be found on the mines except that they are known locally as the Willard Mines.
Dubois Mine	24FR630	unknown	wagon mine to supply coal for Lewistown	only the coal spoil dumps remain	No information could be found on the mines. The name given to them is that of the present landowner.
Frank MacDonald Mine	24FR631	1921-1934	wagon mine to supply coal for Lewistown	only the coal spoil dumps, a house foundation and the remnants of a tipple remain	Even though Archie Motheral started the mine it is known as the Frank MacDonald Mine.
Piper Mine	24FR632	around 1900-1930s	wagon mine to supply coal to the local farmers and ranchers	only the coal spoil dumps and remnants of a tipple remain	Frank Matejcek operated the mine around the early 1920s and Art Stilson operated it until the 1930s. It was generally worked just during the winter months.

Table 3. Summary of inventory data for the coal mines recorded on this project. (continued)

Site Name	Site Number	Dates of Operation	Major Historic Theme	Site Condition	Description and Comments
Brodie and Apple Mines	24FR633	1920-1934	Brodie Mine was established to supply coal to the railroad and the Apple Mine was established to supply coal for local needs	only the coal spoil dumps and remnants of tipples remain	A railroad spur was run to the Brodie Mine for coal sales to the railroad. It employed up to ten men. For the Lewistown coal field this is a fairly large operation. The Apple Mine was a smaller operation selling coal locally. Apple started both mines and later took over the Brodie Mine.
Phillips Mine	24FR634	1926-1933	wagon mine established to sell coal locally and to Lewistown customers	only coal spoil dumps and remnants of tipples remain	The mine was a one man operation with a succession of operators; Milton Phillips, Lawrence Salla and William Flanigan. It was one of the few mines in the Lewistown coal field that had problems with water flooding the workings.
Swanson Mine Complex	24FR635	1912-1966	mines to supply coal to local ranchers and Lewistown	Except at the Johnson mine only coal spoil and remnants of tipples exist. At the Johnson mine the tipple is still fairly intact.	The mines in this complex include the Swanson Mine, Sharp Mine, Plovanich Mine and Johnson Mine. The first mine in the Swanson Mine Complex was the Sharp Mine of 1912. It was started to supply coal to a proposed railroad branch line that did not materialize. Mining at the Swanson Mine continued until 1966. This is probably the last coal mine to operate in central Montana.

Table 3. Summary of inventory data for the coal mines recorded on this project. (continued)

Site Name	Site Number	Dates of Operation	Major Historic Theme	Site Condition	Description and Comments
Cowen Mine	24FR636	1912-1930s	wagon mines to supply coal to Lewistown	only coal spoil dumps and remnants of tipples remains	The first mine opened up in 1912 to furnish coal to a proposed railroad branch line that did not materialize. Two to three miners worked at the mines.
Company Mine	24FR637	1903-1920s	mine to supply coal for nearby gold mine milling operations	only coal spoil dumps and remnants of tipples remain	During the early 1900s the mine supplied coal for the mill at the Gilt Edge Mine. During the 1920s the mines were operated by Scarborough to supply coal to local customers.
Saager Canyon Mine Complex	24JT150	1900-1940s	mines to supply coal for the railroad, farming and customers in the Buffalo community	only coal spoil dumps and remnants of tipples remain	The mines in this complex include the Hollenbeck mine, Williams mine, Bloom mine, Chris Olson mine, Saager Canyon mine, Bachelor mine, John Olson mine and No Name mine. During the early 1900s the mines in the complex supplied coal to the railroad at Buffalo and to local customers. Around 1920 the mines began supplying coal to the farmers for their steam tractors.
Waite Creek Mine	24JT151	ca. 1900	mine to supply coal for the Utica community	only a small amount of coal spoil is left at the site	The mine was operated around 1900 but none of the local informants could remember who operated it.

Table 4. Summary of inventory data for the Gilt Edge gold mine, mill and town.

Site Name	Site Number	Dates of Operation	Site Condition	Description and Comments
Gilt Edge	24FR639	1884-1918	Little remains of the mills. All that is left of the town of Gilt Edge are a few houses. None of the buildings in the business district still exist.	In 1884-1885 Wilson, Anderson, and Munson, started the mines which came to be known as Gilt Edge. In 1892 one of the first cyanide mills in the United States was built just west of the town of Gilt Edge. In 1899 a new cyanide mill was built adjacent to the mine. Overall the Gilt Edge mine was one of the biggest mines in the Judith Mountains.

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APPENDIX A

DSL Designation	Historic Designation	Site Number
Skaggs Mine	Sharp Mine	24FR627*
Dubois Mine (Section 27)	Ottot and Baron Mines	24FR628
Dubois Mine (Section 26)	Willard Mine	24FR629
Dubois Mine (Section 34 & 35)	Dubois (unknown historic name)	24FR630
Coppedge-Bursheim Mine	Frank MacDonald Mine	24FR631
Stewart Mine	Piper Mine	24FR632
Nesselhauf Mine	Brodie and Apple Mine	24FR633
Phillips Mine	Phillips Mine	24FR634
Swanson Mine	Swanson Mine	24FR635
Cowen (Section 17)	Cowen Mine	24FR636
Cowen (Section 9)	Company Mine	24FR637
Giltedge Mine	Giltedge Mine	24FR638
Olson Mine	Saager Canyon Mine Complex	24JT150
Dover Mine	Saager Canyon Mine Complex	24JT150
Keating Mine	Waite Creek Mine	24JT151

*The following site forms are arranged according to number.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24FR627

1.2 Site name/field designation: Sharp Mine

1.3 County: Fergus

1.4 Township/range:

T 15N R 19E W 1/2 E 1/2 SW 1/4 of Section 12

1.5 UTM:

Zone 12

	Easting	Northing
Mine 1	632040	5214340
Mine 2	632070	5214450
Mine 3	632040	5214500

1.6 Site type: coal mines

1.7 Recording status & comments: mapped, photographed and recorded

1.8 Administrative/surface ownership: Western United Life Insurance

1.9 Mineral ownership:

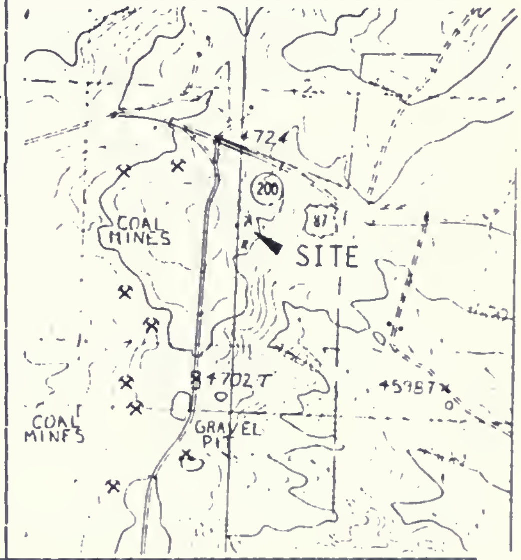
1.10 Project name: Department of State Lands Abandoned Mine Reclamation Program

1.11 General narrative description of site:
The site consists of three mines that are located along the east face of a ravine. All that remains at Mine 1 is a collapsed mine adit and coal spoil dump. At Mine 2 there is a partially collapsed mine adit, coal spoil dump and the upright poles for a tipple. At Mine 3 there is an open adit, a collapsed adit and coal spoil dump.

1.12 Map reference:
USGS Pike Creek, Montana, Provisional edition, 1985, 7.5 Min. Quad.

1.13 City/town: ☒ vicinity of
Lewistown, Montana

1.14 Access to site:
Drive east out of Lewistown on Highway 87 for 7 miles. Turn south onto a gravel road for 1/4 mile. The site is 200 m east of the road just below the rim of a north/south trending ridge.



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MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24FR627

2.1 Geographic setting:

2.2 Elevation: 1402 m 4660 ft.

General: The site is in the foothills of the Judith Mountains. These small mountains rise out of the surrounding plains.
Local: The site is on the east face of a ridge that is the head of the watershed for the North Fork of McDonald Creek to the east.

2.3 View/aspect:
View is limited to around 100 m in all directions due to trees.

2.4 Major drainage:
North Fork of McDonald Creek

2.5 Minor drainage(s):

2.6 Water sources:

Names	Distance	Ele. Change	Type & seasonality

a. A tributary of the North Fork of the McDonald Creek begins at site. McDonald Creek is an intermittent stream.
b.

2.7 Regional vegetation:
Transition zone between the Lodgepole Pine - Douglas Fir Forest and the Eastern Montana Ponderosa Pine Forest (Payne 1973).

2.8 Local vegetation:
ponderosa pine, aspen, fir, chokecherry, wildrose, buckbrush, timothy, brome and bluejoint wheatgrass

2.9 Soils:
dark brown loam

2.10 Surface visibility/season of survey:

poor/winter

2.11 Other environmental factors pertaining to site location:
The site is located within the Lewistown coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24FR627

3.1 Condition of site:
The site has been destroyed.

3.2 Site significance (NRHP):
The mines at the site like the numerous surrounding mines were important to the development of central Montana during the turn of the century. Therefore, the property meets Criterion A. However, since the structures (e.g., tipples) have been destroyed the site lacks physical integrity. The site is not recommended as potentially eligible for listing on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine openings and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson Date: 12/24/86	3.6 Site recorded by: Gene Munson Date: 12/24/86	3.7 Revisions by: Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:
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3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St. Butte, MT 59702

3.12 Photos & accession No:

No.	Description	View
Frame 12	mine 1 overview	N
Frame 13	mine 1 overview	SW
Frame 14	mine 2 overview	SW
Frame 15	mine 3 adit	W
Frame 16	mines 2 and 3 overview	NW

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24FR627

5.1 Site dimensions, how determined:

The site is non-contiguous along the face of a ravine. Mine 2 adit is 110 m north of the adit at mine 1 and is 40 m to 50 m south of the mine adits at mine 3. The following is the area covered by each of the mines. The area of each mine includes the area in which the features are located.

Mine 1: 10 m N/S x 25 m E/W - 200 m^2
Mine 2: 10 m N/S x 15 m E/W - 150 m^2
Mine 3: 20 m N/S x 30 m E/W - 300 m^2
Total area 650 m^2

5.2 Features:

Mine 1: The features at mine 1 consist of a small (6 m x 15 m) coal spoil dump, a collapsed mine adit and a possible collapsed mine adit 6 m to the south.
Mine 2: The features at mine 2 consist of a small (6 m x 10 m) coal spoil dump, a partially collapsed mine adit, and the upright poles for a tipple.
Mine 3: The features at mine 3 consist of an unusually long and narrow (3 m x 25 m) coal spoil and waste rock dump, an open mine adit and a collapsed mine adit 10 m to the north.

5.3 Artifacts (observed, collected):

None

5.4 Historical information and evaluation:

William and Alex Sharp operated the mines from around 1907 until the 1920s (Calvert 1909; Tuss 1986). In 1914 the Sharp mine supplied coal during the construction of the Burlington Northern Railroad grade. Either Mine 2 or Mine 3 (or both) connects with the Peter Kovacich mine to the west. This was not planned and there was some concern expressed by Peter Kovacich when he discovered that the Sharp Mine extended into the coal that he owned. However, the connecting of the mines had a positive result since it greatly helped the circulation of air in both mines. Sharps discontinued mining at the site shortly after the mines were connected (Tuss 1986).

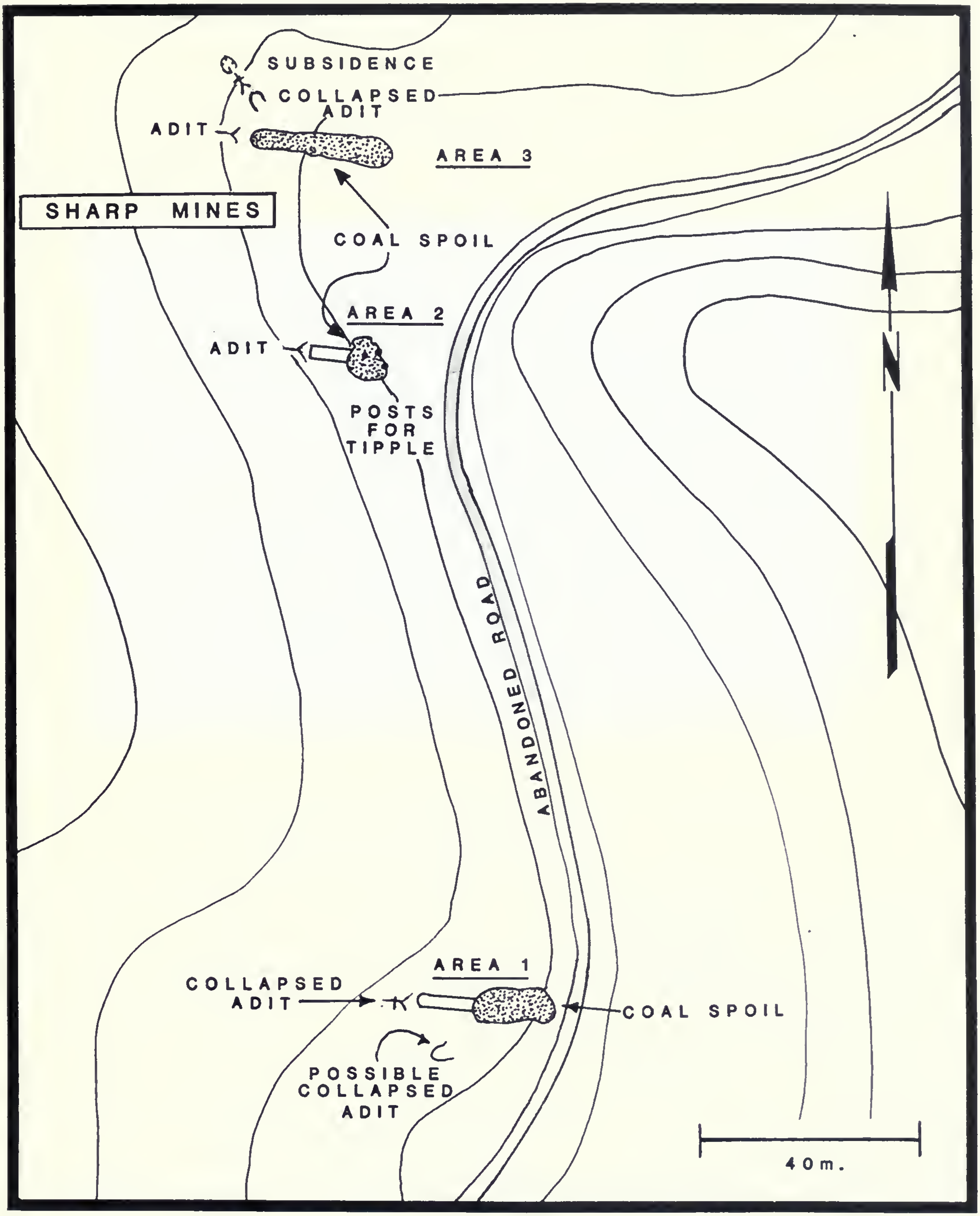
5.5 References:

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

Tuss, Anthony 1986 Personal communication December 29. East of Lewistown, Montana.

5.6 Subsurface testing, results, methods, etc.:

None


SUBSIDENCE
COLLAPSED ADIT
ADIT
AREA 3
SHARP MINES
COAL SPOIL
AREA 2
ADIT
POSTS FOR TIPPLE
ABANDONED ROAD
N
AREA 1
COLLAPSED ADIT
COAL SPOIL
POSSIBLE COLLAPSED ADIT
40m.

Sharp mine #1 (view southwest).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24FR628	1.2 Site name/field designation: Ottot and Baron Mines	1.3 County: Fergus

1.4 Township/range:

T15N R 19E

SE 1/4 NW 1/4
SW 1/4 NE 1/4
NW 1/4 SE 1/4
NE 1/4 SW 1/4

SE 1/4 of Section 27

1.5 UTM:

Zone 12

Mine #1 - 629600 5209670
Mine #2 - 629610 Easting 5209705 Northing

1.6 Site type:
coal mine

1.7 Recording status & comments:

mapped, photographed and recorded

1.8 Administrative/surface ownership:

Doug Dubois
East Fork Road
Lewistown, Montana

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands Abandoned Mine Reclamation Program

1.11 General narrative description of site:

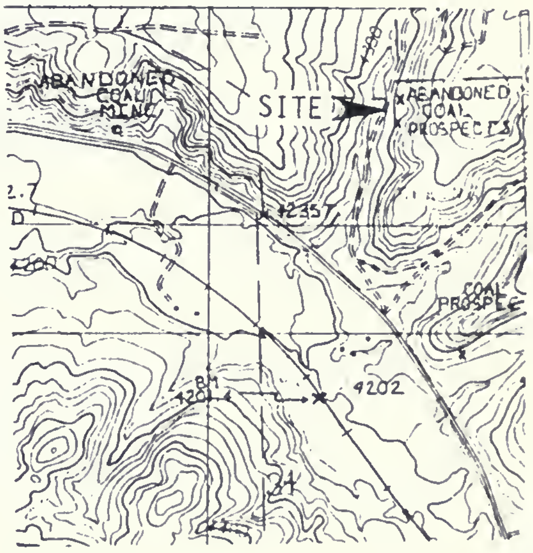
The site consists of two collapsed mine adits and associated coal spoil dumps located on the west facing side of a finger ridge.

1.12 Map reference:
USGS Pike Creek, Montana, Provisional edition, 1985, 7.5 Min. Quad.

1.13 City/town: ☒ vicinity of
Lewistown, Montana

1.14 Access to site:

Drive east out of Lewistown on secondary Highway 283 (Spring Creek road) for 7.5 miles. Turn north onto a trail that is on the opposite side of the highway of the Doug Dubois ranch headquarters. Follow the trail that branches off to the west. Follow this trail for about 1/2 mile. It passes just west of the mines.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24FR628

2.1 Geographic setting:

2.2 Elevation: 1310 m 4300 ft.

General: The site is located in the foothills between the Judith Mountains to the north and the Big Snowy Mountains to the south. These mountains rise out of the surrounding plains.

Local: The site is in a north/south trending ravine. It is on the east side of the ravine on the face of a finger ridge that borders the ravine on the east.

2.3 View/aspect:
The view is limited to about .1 km by topography and trees.

2.4 Major drainage:
North Fork Creek

2.5 Minor drainage(s):
unnamed tributary of North Fork Creek

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	unamed tribuary of North Fork Creek	100 m	12 m	intermittent
b.				

2.7 Regional vegetation:
Eastern Montana Ponderosa Pine Forest (Payne 1973)

2.8 Local vegetation:
ponderosa pine, fir, aspen, chokecherry, wildrose, buckbrush, timothy, brome and yarrow

2.9 Soils:
dark brown loam

2.10 Surface visibility/season of survey:
poor/winter

2.11 Other environmental factors pertaining to site location:
The site is within the Lewistown coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24FR628

3.1 Condition of site:
The site has been destroyed.

3.2 Site significance (NRHP):
The mines at the site like the numerous surrounding mines were important to the development of central Montana during the turn of the century. Therefore, the property meets Criterion A. However, since the site has been destroyed it has lost its integrity. The site is not recommended as potentially eligible for listing on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson Date: 12/27/86	3.6 Site recorded by: Gene Munson Date: 12/27/86	3.7 Revisions by: Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:
Munson, Gene 1987 A Cultural Resource Inventory and Evaluation of Selected Coal Mines and a Gold Mine Near Lewistown, Montana. For the Montana Department of State Lands. GCM Services, Inc., Butte.

3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St. Butte, MT 59702

3.12 Photos & accession No:

No.	Description	View
Dubois Section 27		
Frame 20	Mine 1 overview	E
Frame 21	Mine 2 overview	E

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24FR628

5.1 Site dimensions, how determined:
The site measures 35 m N/S x 50 m E/W. This is the area in which the mine adits, coal spoil dumps and artifacts are located.

1500 m^2

5.2 Features:
Mine 1: Features at Mine 1 consists of a collapsed mine adit and a coal spoil dump.
Mine 2: Features at Mine 2 consists of a collapsed mine adit and a coal spoil dump.

5.3 Artifacts (observed, collected):

Artifacts consist of the remains of two coal carts.

5.4 Historical information and evaluation:

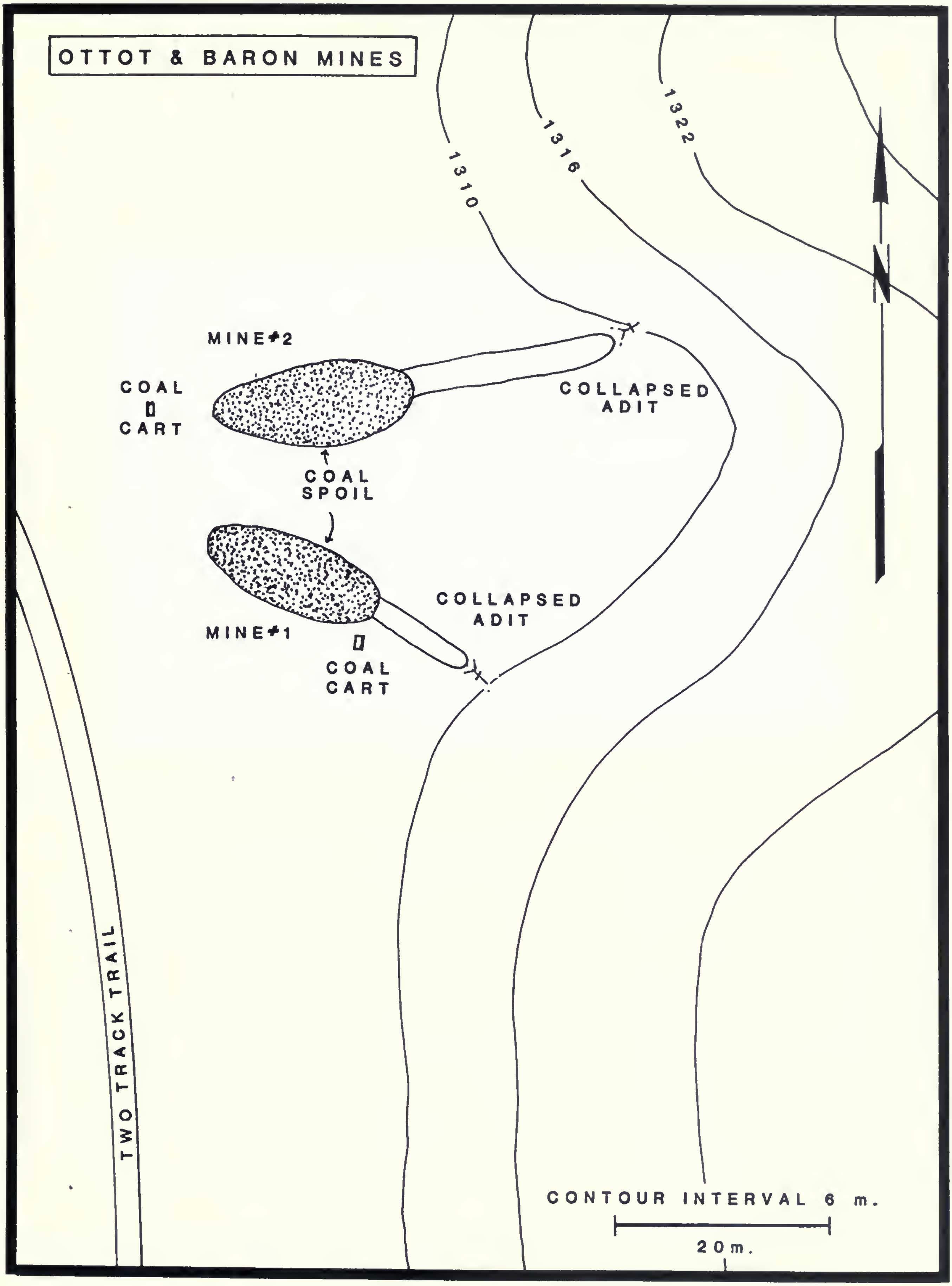
George Ottot and Charley Baron operated the mines around 1920 (Tuss 1986). The locations of records that were checked for further information on the mines are: 1) Government Land Office Records, Bureau of Land Management, Billings, Montana; 2) Fergus County Courthouse, Lewistown, Montana; and 3) Carnegie Public Library, Lewistown, Montana.

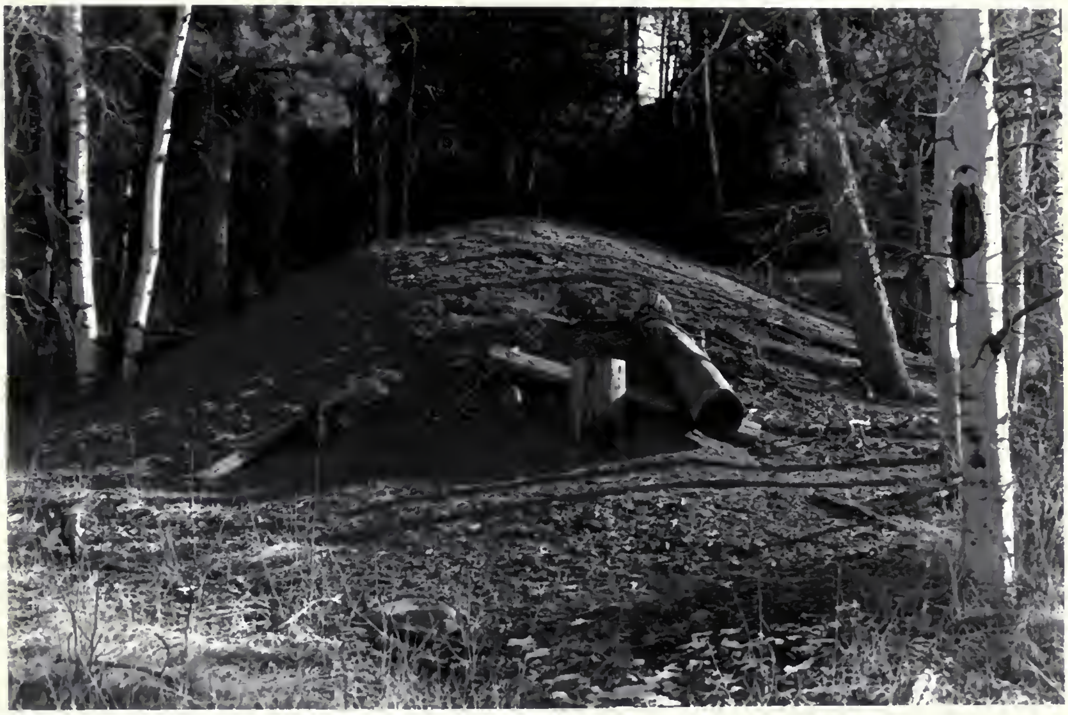
5.5 References
(See Section 3.9)

Payne, Gene F.
1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.
Tuss, Anthony
1986 Personal communication, December 29, east of Lewistown, Montana.

5.6 Subsurface testing, results, methods, etc.

None


OTTOT & BARON MINES
1310
1316
1322
N
MINE#2
COAL CART
COLLAPSED ADIT
COAL SPOIL
COLLAPSED ADIT
MINE#1
COAL CART
TWO TRACK TRAIL
CONTOUR INTERVAL 6 m.
20m.



Ottot and Baron mine #2 (view east)

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24FR629	1.2 Site name/field designation: Willard Mine	1.3 County: Fergus

1.4 Township/range:

T 15N	R 19E	NW 1/4 E 1/2	NW 1/4 SW 1/4	SE 1/4 NE 1/4 of Section 26

1.5 UTM:

Zone 12	Easting	Northing
Mine 1	631020	5210230
Mine 2	631050	5210220
Mine 3	631090	5210350
Mine 4	631080	5210450
Mine 5	630920	5210080

1.6 Site type:
coal mine

1.7 Recording status & comments:

mapped, photographed and recorded

1.8 Administrative/surface ownership:

Doug Dubois
East Fork Road
Lewistown, Montana

1.9 Mineral ownership:

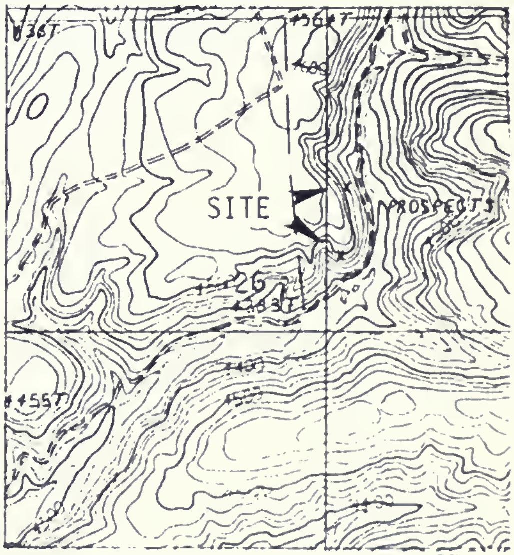
1.10 Project name:
Department of State Lands
Abandoned Mine Reclamation
Program

1.11 General narrative description of site:
The site consists of five mines and associated coal spoil dumps located on the west side of a ravine.

1.12 Map reference:
USGS Pike Creek, Montana, Provisional Edition 1985, 7.5 Min. Quad.

1.13 City/town: ☒ vicinity of
Lewistown, Montana

1.14 Access to site:
Drive east out of Lewistown on secondary Highway 287 (Spring Creek road) for 7.5 miles. Turn north onto a trail that is on the opposite side of the highway of the Doug Dubois ranch headquarters. Follow the trail that trends to the NE. Follow it for a little over one mile. The mines are adjacent to the trail.



D86P.1

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24FR629

2.1 Geographic setting:

2.2 Elevation: 1350 m 4440 ft.
1360 4470

General: The site is located in the foothills between the Judith Mountains to the north and the Big Snowy Mountains to the south. These mountains rise out of the surrounding plains.
Local: The site is in a NE/SW trending ravine. It is on the NW face of the ravine.

2.3 View/aspect:
View is limited to around .2 km or less due to trees and topography.

2.4 Major drainage:
East Fork Creek

2.5 Minor drainage(s):
unnamed tributary of East Fork Creek

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	unnamed tributary of East Fork Creek		6-18 km	intermittent
b.				

2.7 Regional vegetation:
Eastern Montana Ponderosa Pine Forest (Payne 1973)

2.8 Local vegetation:
ponderosa pine, fir, aspen, chokecherry, wildrose, buckbrush, timothy, brome and yarrow

2.9 Soils:
dark brown loam

2.10 Surface visibility/season of survey:
poor/winter

2.11 Other environmental factors pertaining to site location:

The site is within the Lewistown coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24FR629

3.1 Condition of site:
The site has been destroyed.

3.2 Site significance (NRHP):
The mines at the site like the numerous surrounding mines were important to the development of central Montana during the turn of the century. Therefore, the property meets Criterion A. However, since the site has been destroyed its integrity has been lost. The site is not recommended as potentially eligible for listing on the NRHP.

3.3 Impacts:
The Department of State Lands plans to close the mine opening and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson Date: 12/27/86	3.6 Site recorded by: Gene Munson Date: 12/27/86	3.7 Revisions by: Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:
Munson, Gene 1987 A Cultural Resource Inventory and Evaluation of Selected Coal Mines and a Gold Mine near Lewistown, Montana. For the Montana Department of State Lands. GCM Services, Inc., Butte.

3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St. Butte, MT 59702

3.12 Photos & accession No:

No.	Description	View
Dubois Section 26		
Frame 23	Mine 1 overview	NW
Frame 24	Mine 2 adit	NW
Frame 25	Mine 2 overview	NW
Frame 26	Mine 2 overview	NW
Frame 27	Mine 3 overview	NW
Frame 28	Mine 4 overview	NW
Frame 29	Mine 4 overview	NW
Frame 20	Mine 4 adit	NW
Frame 31	Mine 5 overview	NW

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24FR629

5.1 Site dimensions, how determined:
The site is noncontiguous along the NW face of a finger ridge. The area is that in which the features at each mine are located.

Mine 1: 10 m x 20 m - Area: 200 m^2
Mine 2: 40 m x 30 m - Area: 600 m^2
Mine 3: 18 m x 5 m - Area: 90 m^2
Mine 4: 30 m x 20 m - Area: 600 m^2
Mine 5: 15 m x 10 m - Area: 150 m^2

Total area 1640 m^2

5.2 Features: The following lists the features at each site.

Mine 1: The features consist of a collapsed mine adit and coal spoil dump.
Mine 2: The features consist of a collapsed mine adit, coal spoil dump and an upright post that may have been part of a tipple.
Mine 3: The features consist of a collapsed mine adit and coal spoil dump.
Mine 4: The features consist of a collapsed mine adit, a coal spoil dump and upright posts that probably were part of a tipple.
Mine 5: The features consist of a mine adit that is about 99% collapsed and some coal spoil.

5.3 Artifacts (observed, collected):
The only artifacts observed were at Mine 2. They consist of a section of 8 pound steel rail for mine car track, and a piece of cable.

5.4 Historical information and evaluation:

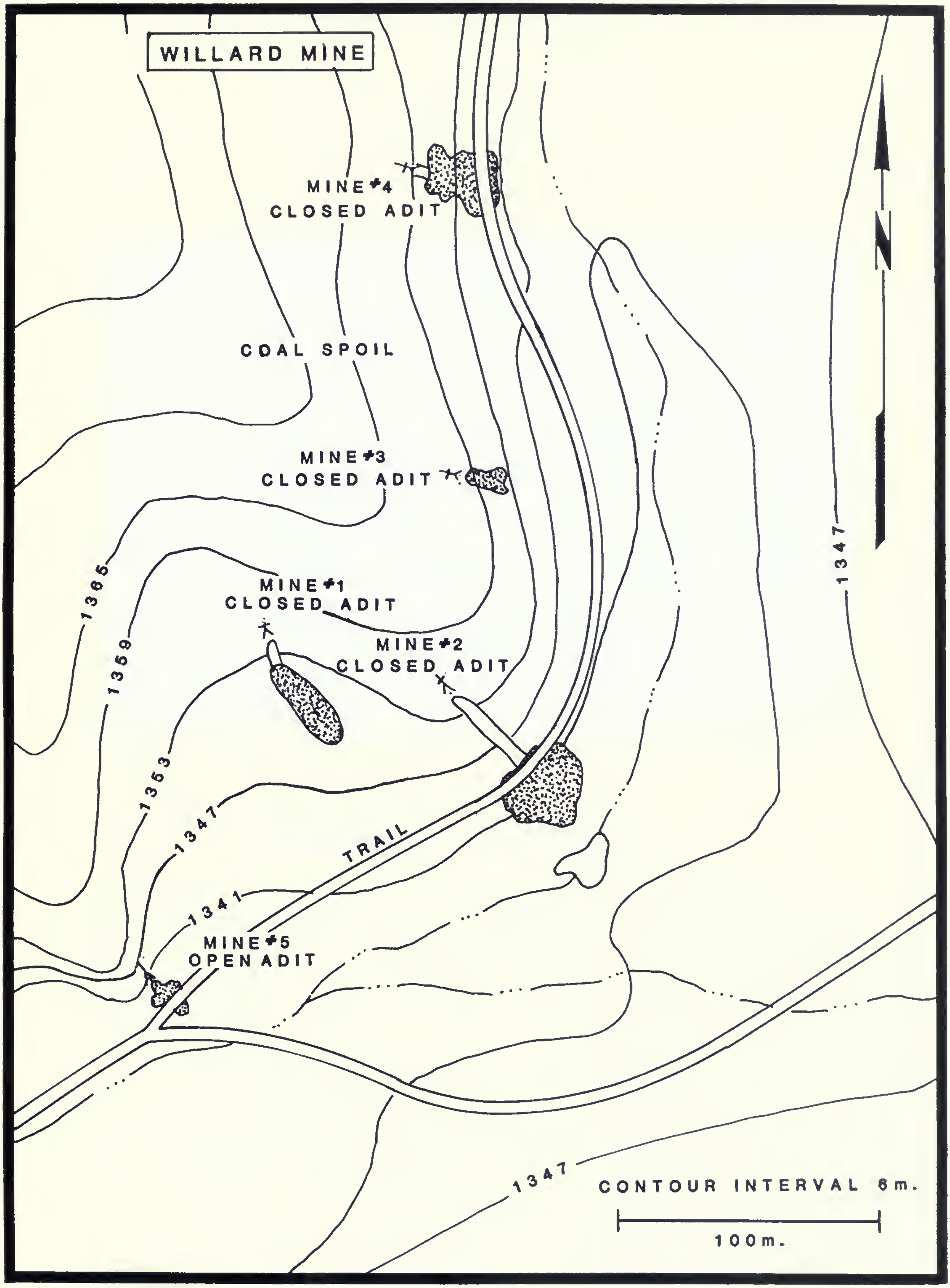
Little is known about the mines other than they were operated by John H. Willard at the turn of this century (Tuss 1986). The locations of records that were checked for further information on the mines are: 1) Government Land Office Records, Bureau of Land Management, Billings, Montana; 2) Fergus County Counthouse, Lewistown, Montana; 3) Carnegie Public Library, Lewistown, Montana; 4) Montana Bureau of Mines and Geology, Butte, Montana; and 5) the Montana School of Mines and Technology Library, Butte, Montana.

5.5 References

Payne, Gene F.
1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

Tuss, Anthony
1986 Personal communication, December 29, east of Lewistown, Montana.

5.6 Subsurface testing, results, methods, etc.
None


WILLARD MINE
MINE #4
CLOSED ADIT
COAL SPOIL
MINE #3
CLOSED ADIT
MINE #1
CLOSED ADIT
MINE #2
CLOSED ADIT
1365
1359
1353
1347
TRAIL
1341
MINE #5
OPEN ADIT
1347
N
1347
CONTOUR INTERVAL 6m.
100m.

Willard mine #2 (view northwest).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24FR630	1.2 Site name/field designation: Dubois - Section 34 and 35	1.3 County: Fergus

1.4 Township/range:

		center of E1/2	NE1/4		Section 34
T 15N	R 19E	SE 1/4	NE 1/4	NE 1/4 of	Section 34
		SW 1/4	NW 1/4	NW 1/4	35

1.5 UTM:

Zone		Easting	Northing
12	Mine #1	629800	5208950
	Mine #2	630000	5209050

1.6 Site type:
coal mine

1.7 Recording status & comments:

mapped, photographed and recorded

1.8 Administrative/surface ownership:

Doug Dubois
East Fork Road
Lewistown, Montana

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mine Reclamation Program

1.11 General narrative description of site:

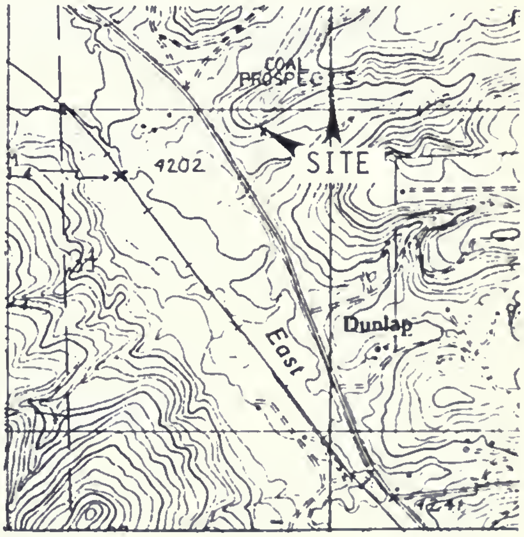
The site consists of two abandoned mines that are located on the east face of a finger ridge. All that is left at the mines are collapsed mine adits and coal spoil dumps.

1.12 Map reference:
USGS Pike Creek, Montana, Provisional edition 1985, 7.5 Min Quad.

1.13 City/town: ☒ vicinity of
Lewistown, Montana

1.14 Access to site:

Drive east out of Lewistown on secondary Highway 283 (Spring Creek road) for 7.5 miles. The mines are in a coulee on the north side of the road. They are 150 m and 400 m from the road and are easily seem from it.



D86P.1

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24FR630

2.1 Geographic setting:	2.2 Elevation: 1310 m 4300 ft.

General: The site is located in the foothills between the Judith Mountains to the north and the Big Snowy Mountains to the south. These mountains rise out of the surrounding plains.

Local: The site is in a NE/SW trending ravine. It is on the east face of a high finger ridge that borders the ravine on the northwest.

2.3 View/aspect:

The view is to the southeast for about .2 km and to the southwest down the ravine and into the East Fork Creek drainage for about .5 km.

2.4 Major drainage: East Fork Creek	2.5 Minor drainage(s): unnamed tributary in ravine at site

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	unnamed tributary at East Fork Creek	.1 km	12 m	intermittent
b.				

2.7 Regional vegetation:

Eastern Montana Ponderosa Pine Forest (Payne 1973)

2.8 Local vegetation:

ponderosa pine, fir, aspen, chokecherry, wildrose, buck brush, timothy, brome, and bluejoint wheatgrass

2.9 Soils:

reddish brown loam

2.10 Surface visibility/season of survey:

poor/winter

2.11 Other environmental factors pertaining to site location:

The site is within the Lewistown coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24FR630

3.1 Condition of site:
The site is destroyed.

3.2 Site significance (NRHP):
The mines at the site like the numerous surrounding mines were important to the development of central Montana during the turn of the century. Therefore, the property meets Criterion A. However, since the property retains little of the physical characteristics it possessed in the past, its capacity to convey association with this historical pattern has been impaired. The site is not recommended as potentially eligible for listing on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson Date: 12/27/86	3.6 Site recorded by: Gene Munson Date: 12/27/86	3.7 Revisions by: Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:
Munson, Gene
1987 A Cultural Resource Inventory and Evaluation of Selected Coal Mines and a Gold Mine Near Lewistown, Montana. For the Montana Department of State Lands. GCM Services, Inc., Butte.

3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St. Butte, MT 59702

3.12 Photos & accession No:

No.	Description	View
Frame 33	overview Mine 1	NW
Frame 34	overview Mine 2	NW

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24FR630

5.1 Site dimensions, how determined:
The site is noncontiguous along the west face of a ravine. The site's dimensions are the areas within which the mine adits and coal spoil dumps are located.

Mine #1: 20 m NW/SE x 8 m NE/SW - Area 160 m^2
Mine #2: 18 m NW/SE x 6 m SW/NE - Area 108 m^2

Total area 268 m^2

5.2 Features:

Mine 1: The features at mine 1 consists of a collapsed mine adit and a 15 m x 10 m coal spoil dump.

Mine 2: The features at mine 2 consists of a collapsed mine adit and a 12 m x 5 m coal spoil dump.

5.3 Artifacts (observed, collected):

None

5.4 Historical information and evaluation:

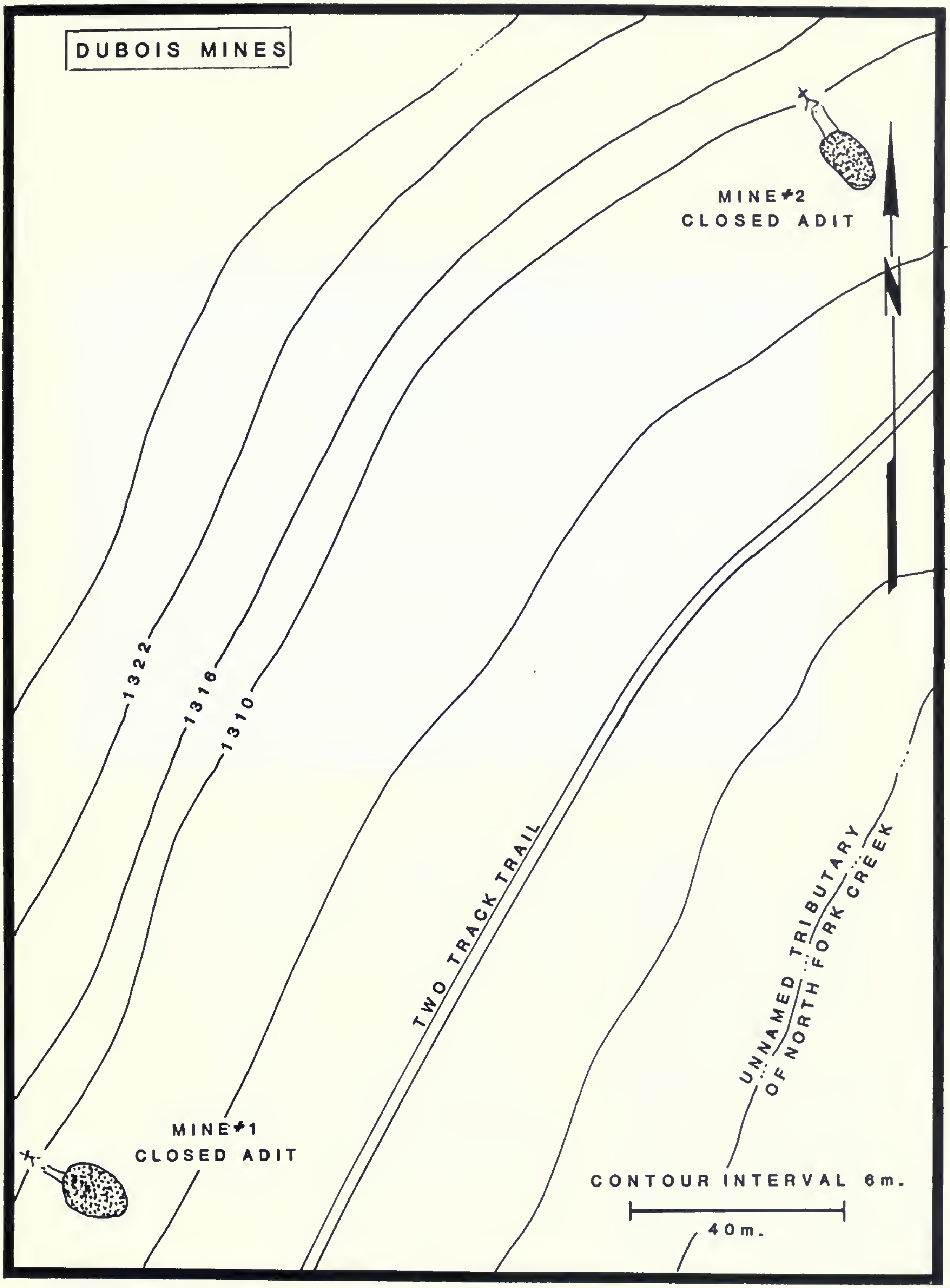
No historical information could be found on the mines. Innumerable local informants were interviewed. The locations of records that were checked for information on the mines are: 1) Government Land Office Records, Bureau of Land Management, Billings, Montana; 2) Fergus County Courthouse, Lewistown, Montana; 3) Carnegie Public Library, Lewistown, Montana; 4) Montana Bureau of Mines and Geology, Butte, Montana; and 5) the Montana School of Mines and Technology Library, Butte, Montana.

5.5 References
(see Section 3.9)

Payne, Gene F.
1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State Univeristy, Bozeman.

5.6 Subsurface testing, results, methods, etc.

None


DUBOIS MINES
MINE #2
CLOSED ADIT
N
1322
1316
1310
TWO TRACK TRAIL
UNNAMED TRIBUTARY
OF NORTH FORK CREEK
MINE #1
CLOSED ADIT
CONTOUR INTERVAL 6m.
40m.

Dubois Section 34 and 35 mine #1 (view northwest).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24FR631

1.2 Site name/field designation: Frank McDonald Mine

1.3 County: Fergus

1.4 Township/range:

T 15N R 19E center of NE 1/4 SW 1/4 of Section 35

1.5 UTM:

Zone 12 630620 Easting 5208300 Northing

1.6 Site type: coal mine

1.7 Recording status & comments:

mapped, photographed and recorded

1.8 Administrative/surface ownership:

Spring Creek Tracts Land Company
Lewistown, Montana

1.9 Mineral ownership: Federal

1.10 Project name: Department of State Lands Abandoned Mine Reclamation Program

1.11 General narrative description of site:

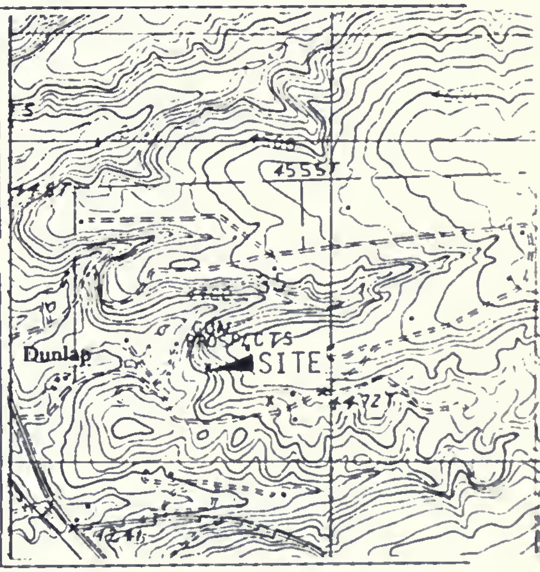
The site consits of a collapsed mine adit and coal spoil dump on the south face of the valley above the East Fork of Spring Creek.

1.12 Map reference: USGS Pike Creek, MOntana, Provisional edition 1985, 7.5 Min Quad

1.13 City/town: Lewistown ☒ vicinity of

1.14 Access to site:

Drive east out of Lewistown on Highway 283 (Spring Creek road) for 7 miles. Turn east onto an improved dirt road for 3/8 of a mile. The mine is on the hillside north of and 180 m from the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24FR631

2.1 Geographic setting:

2.2 Elevation: 1347 m 4420 ft.

General: The site is in the foothills that lie between the Judith Mountains and the Big Snowy Mountains. The mountains rise out of the surrounding plain.
Local: The site is on the south face of the ravine through which East Fork Creek flows.

2.3 View/aspect:
View is to the south and southwest for about 1 km.

2.4 Major drainage:
Big Spring Creek

2.5 Minor drainage(s):
East Fork Creek

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	East Fork Creek	.7 km	50 m	year around
b.				

2.7 Regional vegetation:
Foothill - Grasslands Type (Payne 1973)

2.8 Local vegetation:
ponderosa pine, aspen, fir, chokecherry, wildrose, buckbrush, timothy and brome

2.9 Soils:
reddish brown loam

2.10 Surface visibility/season of survey:
fair/winter

2.11 Other environmental factors pertaining to site location:

The site is located within the Lewistown coal fields.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24FR631

3.1 Condition of site:
The site has been destroyed.

3.2 Site significance (NRHP):

The mine, along with numerous other coal mines in the area, played an important role in the development of central Montana. Therefore, the site meets Criterion A. However, since the majority of the property is no longer intact, it no longer has any integrity. The site is not recommended as potentially eligible for listing on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson	3.6 Site recorded by: Gene Munson	3.7 Revisions by:
Date: 12/27/86	Date: 12/27/86	Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:
GLO Records 1921-1937 U.S. Department of Interior, Geologic Survey, Report of Royalities and Rentals, Bureau of Land Management, Billings.
Munson, Gene 1987 A Cultural Resource Inventory and Evaluation of Selected Coal Mines and a Gold Mine Near Lewistown, Montana. For the Montana Department of State Lands. GCM Services, Inc., Butte.

3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St. Butte, MT 59702

3.12 Photos & accession No:

No.	Description	View
Frame 37	overview	N
Frame 38	view on top of waste rock at mine entrance	E

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24FR631

5.1 Site dimensions, how determined:
The site measures 20 m N/S x 30 m E/W. This is the area in which the features and artifacts are located.

600 m^2

5.2 Features:
The features at the site consists of a coal and waste rock spoil dump, a collapsed adit and remains of upright posts that may have been at one time part of a tipple.

5.3 Artifacts (observed, collected):
Artifacts consist of a few boards, a short piece of 1 x 2 in rail for a mine car track, and a few short pieces of 1-1/4 in pipe.

5.4 Historical information and evaluation:
The mine was begun by Archie J. Motheral. Since the coal was federally owned, Motheral first filed for a prospecting permit (GLO permit serial No. 045557) in April of 1921. On November 24, 1923 a coal lease was awarded to Mr. Motheral (GLO serial No. Billings - 022599). Frank F. McDonald, on February 11, 1926, was awarded the lease by paying the government $313.61 of back royality payments. Frank McDonald continued to operate the mine until 1934. It was a small operation producing about 550 tons of coal per year (GLO Records 1921-1937; Tuss 1986).

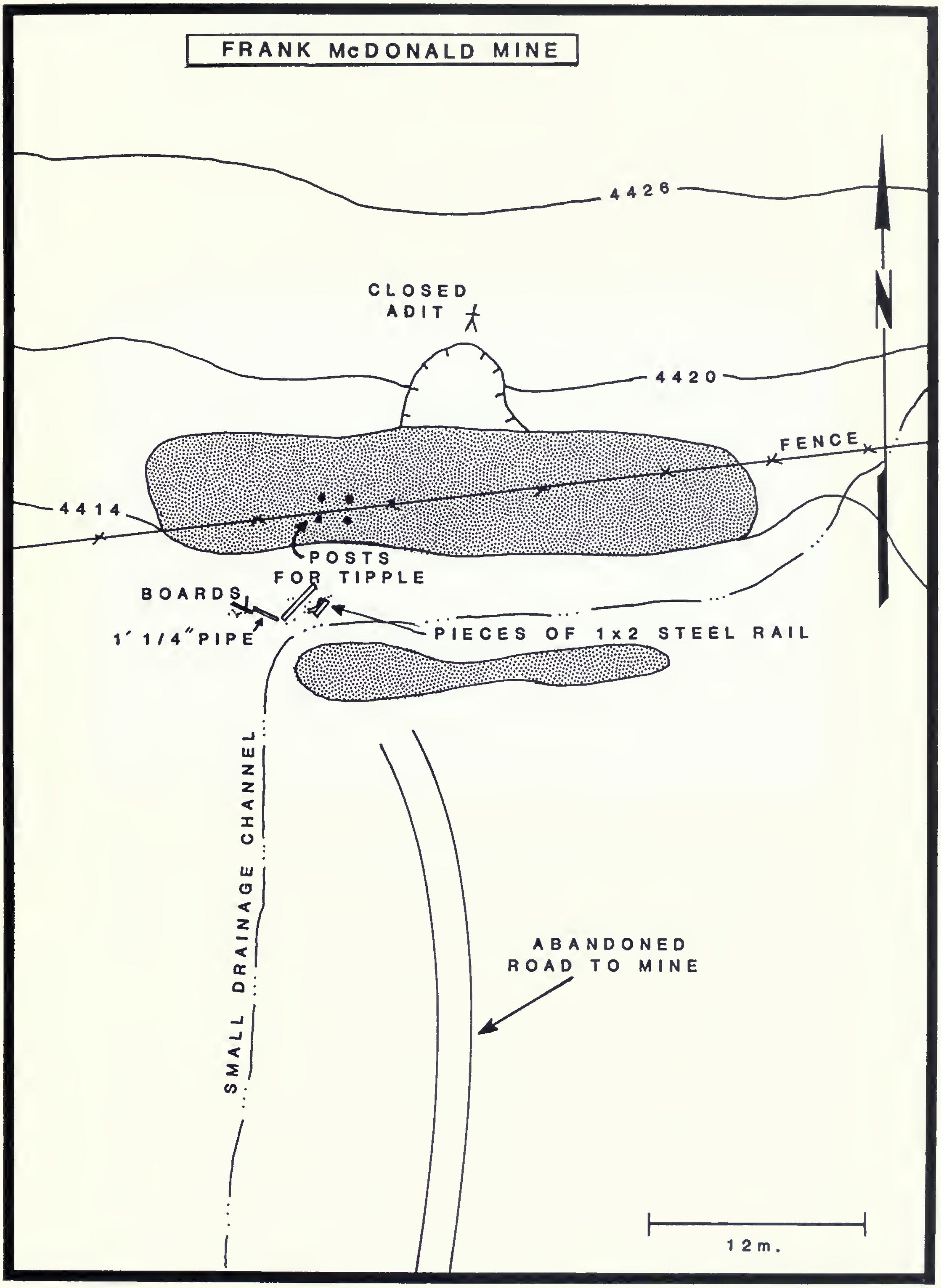
5.5 References
(See Section 3.9)

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

Tuss, Anthony 1986 Personal communication, December 29, east of Lewistown.

5.6 Subsurface testing, results, methods, etc.

None


FRANK McDONALD MINE
4426
N
CLOSED ADIT
4420
FENCE
4414
POSTS FOR TIPPLE
BOARDS
1´ 1/4˝ PIPE
PIECES OF 1x2 STEEL RAIL
SMALL DRAINAGE CHANNEL
ABANDONED ROAD TO MINE
12m.

Frank McDonald mine (view north).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number:
24FR632

1.2 Site name/field designation:
Piper Mine

1.3 County:
Fergus

1.4 Township/range:

NE1/2 NE1/4 SE1/4
T 14N R 20E S 1/2 SE 1/4 NE 1/4 of Section 6

1.5 UTM:

Zone 12 634800 Easting 5206950 Northing

1.6 Site type:
coal mine

1.7 Recording status & comments:
mapped, photographed and recorded

1.8 Administrative/surface ownership:
The Fergus County Courthouse show Gordon and Margie Backentin of Lewistown, Montana as owners. Stewarts are either leasing the property or in the process of purchasing it.

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands Abandoned Mine Reclamation Program

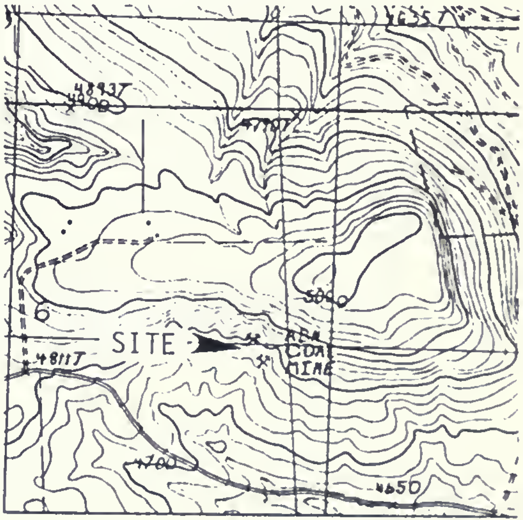
1.11 General narrative description of site:

The site consists of three collapsed mine adits, associated coal spoil dumps and a foundation for a building. The mine adits are on the south face of a hill. Adit 1 is about 45 m from adit 2 which is about 60 m from adit 3.

1.12 Map reference:
USGS Horsethief Coulee West, Montana, Provisional edition 1985, 7.5 Min Quad.

1.13 City/town: ☒ vicinity of
Lewistown

1.14 Access to site:
Drive southeast out of Lewistown on Secondary Road 238 (Spring Creek road) to the end of the pavement. This is about 8 miles. Continue east on the Forest Grove/Grass Range County gravel road for 3 miles. The site is on the hillside on the northside of the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24FR632

2.1 Geographic setting:

2.2 Elevation: 1463 m 4800 ft.

General: The site is in the foothills between the Big Snowy Mountains to the south and the Judith Mountains to the north. These mountains rise out of the surrounding plains.
Local: The site is on the south face of a 30-60 m high hill.

2.3 View/aspect:
The view is to the south for several kilometers.

2.4 Major drainage:
South Fork of McDonald Creek

2.5 Minor drainage(s):
unnamed ephemeral stream of McDonald Creek

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	South Fork McDonald Creek	2 km	90 km	intermittent
b.				

2.7 Regional vegetation:
Foothill Grassland type (Payne 1973)

2.8 Local vegetation:
ponderosa pine, aspen, fir chokecherry, wildrose, brome, timothy, buck brush and bluejoint wheatgrass

2.9 Soils:
reddish brown loam

2.10 Surface visibility/season of survey:
poor/winter

2.11 Other environmental factors pertaining to site location:
The site is within the Lewistown coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24FR632

3.1 Condition of site:
The site has been destroyed.

3.2 Site significance (NRHP):
These mines as well as numerous other mines in the area played an important role in the development of Central Montana and, therefore, meet Criterion A. However, since the remains at the mines have been destroyed the site's physical integrity has been lost. The site is not recommended as potentially eligible for listing on the NRHP.

3.3 Impacts:
The Department of State Lands plans to either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson Date: 12/23/86	3.6 Site recorded by: Gene Munson Date: 12/23/86	3.7 Revisions by: Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:

Drinkard, William V. 1976 Drinkard Family History. In The Heritage Book of Original Fergus County. Babbie Deal and Loretta McDonald, editors, pp. 86-93.

Munson, Gene 1987 A Cultural Resource Inventory and Evaluation of Selected Coal Mines and a Gold Mine Near Lewistown, Montana. For the Montana Department of State Lands. GCM Services, Inc., Butte.

3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St. Butte, MT 59702

3.12 Photos & accession No:

No.	Description	View
Frame 21	overview	NE
Frame 22	overview	NW
Frame 23	overview	NW
Frame 24	Mine 3 spoil	NE
Frame 25	screen	down
Frame 27	stone foundation	N

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24FR632

5.1 Site dimensions, how determined:
The area measures 50 m N/S x 100 E/W. This is the area in which the adits, spoils, foundation and artifacts are located within.

5,000 m²

5.2 Features:
The three coal spoil dumps are the most pronounced features at the site. They are relatively small, i.e., 10 m to 20 m across. The adits are collapsed and are barely discernable. The foundation for a building (see map) measures 3 m N/S x 7 m E/W. It is made of uncoursed random sandstone rubble. In some places mortar was used between the rocks.

5.3 Artifacts (observed, collected):
At mine adit #3 artifacts consist of a wood frame for a small engine driven hoist, and a coal screen made of 3/4 in pipe on a frame made of 3 in x 6 in planks. There are no artifacts at mine adits #1 and #2. East of the building foundation there is a bed spring.

5.4 Historical information and evaluation:

By 1907 this small wagon mine with a 34 in. thick coal seam had a slope driven a distance of 315 ft down dip, which was about 10°. Coal was taken from the mine only during the winter (Calvert 1909). It continued to be worked intermittently until the early 1930s. Frank Matejcek operated the mine in the late teens and early 1920s. He sold the land to Art Silson who operated the mine until the early 1930s. During this period, Jim Truback, a bachelor, who lived at the mine did most of the actual mining. Like most of the mines in the area the drifts off of the main tunnel were quite low, i.e., the thickness of the coal seams (Drinkard 1976; Tuss 1986).

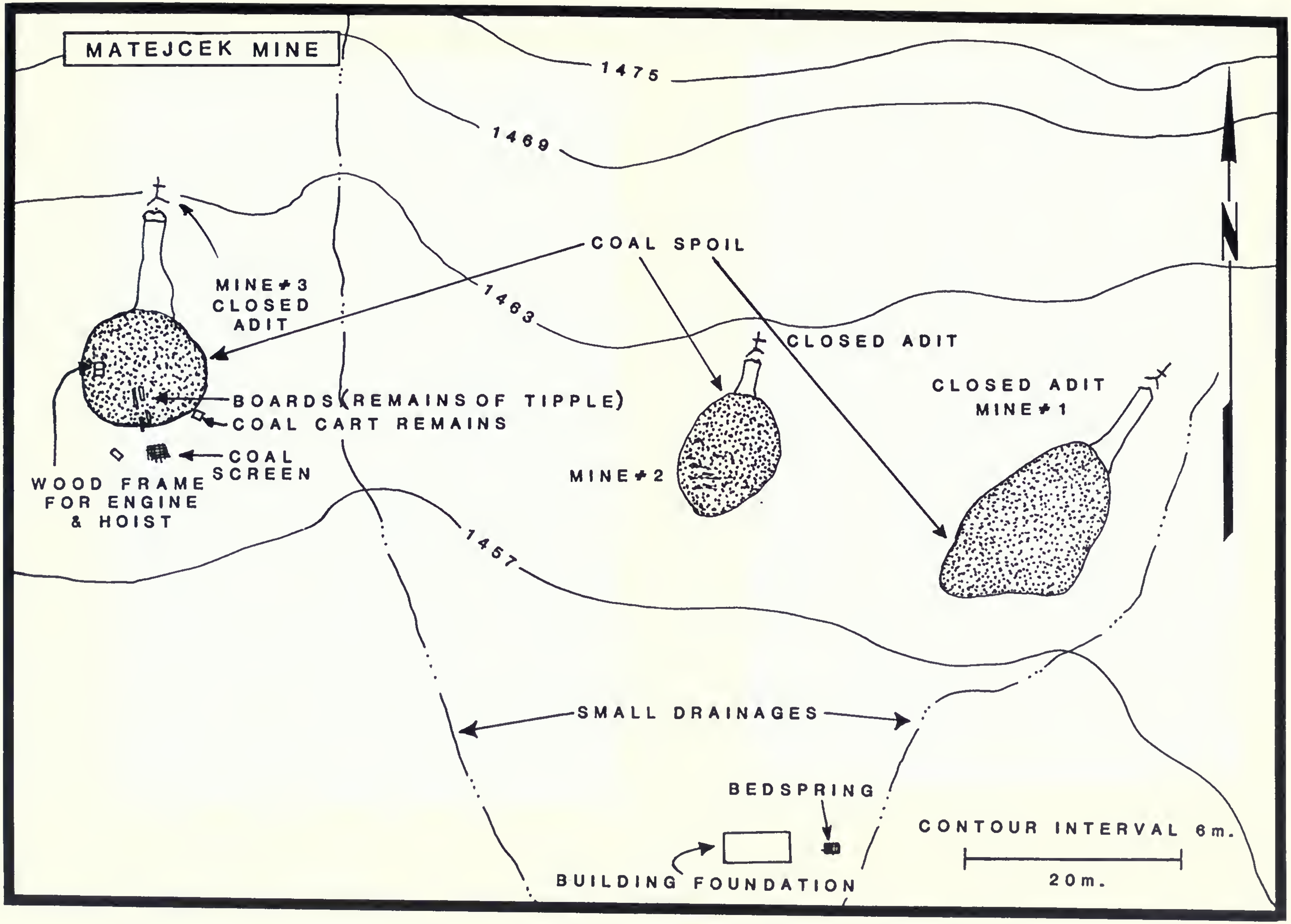
5.5 References
(See Section 3.9)

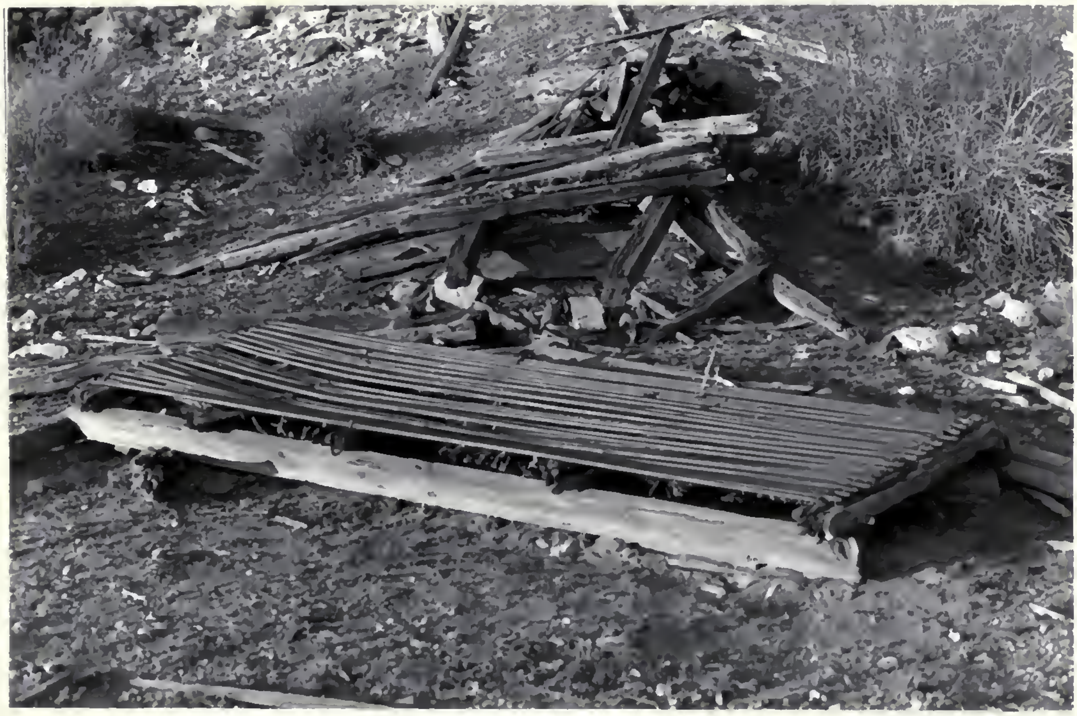
Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

Tuss, Anthony 1986 Personal communcation December 29. East of Lewistown, Montana.

Calvert, W. R. 1909 Geology of the Lewistown Coal Field, Montana. Department of Interior. United States Geological Survey. Bulletin 390.

5.6 Subsurface testing, results, methods, etc.
None


MATEJCEK MINE
1475
1469
1463
1457
N
COAL SPOIL
MINE #3 CLOSED ADIT
BOARDS (REMAINS OF TIPPLE)
COAL CART REMAINS
COAL SCREEN
WOOD FRAME FOR ENGINE & HOIST
CLOSED ADIT
MINE #2
CLOSED ADIT MINE #1
SMALL DRAINAGES
BEDSPRING
BUILDING FOUNDATION
CONTOUR INTERVAL 6m.
20m.



Coal screen and remains of tipple at Piper mine #3

Remains of hoisting unit at Piper mine #3 (view northeast)

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number:
24FR633

1.2 Site name/field designation:
Brodie and Apple Mines

1.3 County:
Fergus

1.4 Township/range:

T 14N R 21E

N 1/2 SW 1/4
S 1/2 NW 1/4 SW 1/4 of Section 1
SW 1/4 NE 1/4

1.5 UTM:

Mine #1 621250 651400
Zone 12 Mine #2 5207000 Easting 5207000 Northing

1.6 Site type:

coal mine

1.7 Recording status & comments:

mapped, photographed and recorded

1.8 Administrative/surface ownership:

John and Marjorie Nesselhauf
Forest Grove, Montana

1.9 Mineral ownership:
Federal

1.10 Project name:
Department of State Lands Abandoned Mine Reclamation Program

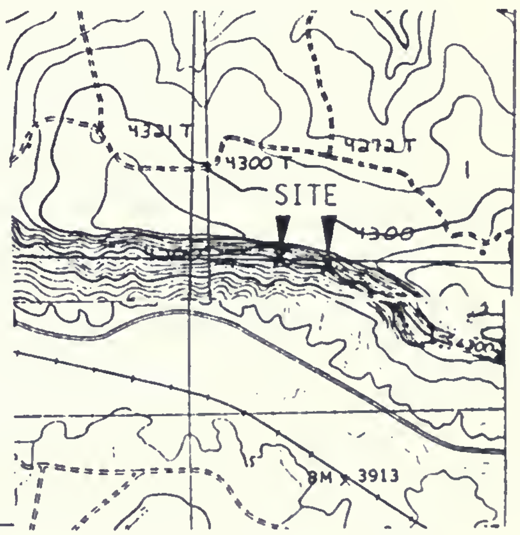
1.11 General narrative description of site:

The site consists of three mine adits and two coal spoil dumps on the south face of the bluff that borders the south fork of McDonald's Creek.

1.12 Map reference:
USGS Horsethief Coulee East Montana Provisional edition, 1985 7.5 quad and
USGS Forest Grove, Montana, 1970, 7.5 min. quad

1.13 City/town: ☒ vicinity of
Grass Range, MT

1.14 Access to site:
Drive west out of Grass Range on the Forest Grove road for 13 miles (this is 2.5 miles east of Forest Grove). The mines can be seen from the road. They are on the north side of it on the face of the bluff that borders the south fork of McDonald Creek.



D86P.2

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24FR633

2.1 Geographic setting:

2.2 Elevation: 1280 m 4200 ft.

General: The site is in the foothills fo the Big Snowy Mountains. These mountains rise out of the surrounding plains.
Local: The site is on the south face of a 100 m high bluff that borders the south fork of McDonald Creek. The mine adits are about 10 m below the rim of the bluff.

2.3 View/aspect:
The view is for several kilometers to the south.

2.4 Major drainage:
South Fork of McDonald Creek

2.5 Minor drainage(s):

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	South Fork of McDonald Creek	.5 km	106 m	year around
b.				

2.7 Regional vegetation:
Ponderosa Pine Savannah (Payne 1973)

2.8 Local vegetation:
ponderosa pine, bluejoint wheatgrass

2.9 Soils:
sandy light brown loam

2.10 Surface visibility/season of survey:

good/winter

2.11 Other environmental factors pertaining to site location:
The site is located within the Lewistown coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24FR633

3.1 Condition of site: The site has been destroyed.

3.2 Site significance (NRHP):
The mines at this site, as well as, the numerous mines in the area played an important role in the development of Forest Grove, Grass Range and the surrounding area during the turn of this century. Therefore, the site meets Criterion A. However, since the majority of the physical remains of the site have been destroyed, its integrity has been greatly impaired. The site is not recommended as potentially eligible for listing on the NRHP.

3.3 Impacts:
The Department of State Lands plans to close the mine openings and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson Date: 12/28/86	3.6 Site recorded by: Gene Munson Date: 12/28/86	3.7 Revisions by: Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:
General Land Office Records
1921-1938 U.S. Department of the Interior, Geologic Survey, Quarterly Reports of Royalties and Rentals. Bureau of Land Management, Billings.
Lerwill, J.R.
1934 Letter dated April 21, 1934. In GLO Files U.S. Department of the Interior, Geologic Survey, Quarterly Report of Royalties and Rentals.
Munson, Gene
1987 A Cultural Resource Inventory and Evaluation of Selected Coal Mines and a Gold Mine Near Lewistown, Montana. For the Department of State Lands. GCM Services, Inc., Butte.

3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St. Butte, MT 59702

3.12 Photos & accession No:

No.	Description	View
Nesselhauf Mine 1	overview	N
Frame 17	remains of slide	N
Frame 18	looking downslide	S
Frame 19 & 20	from adit	N
Frame 21	adit	N
Frame 22 & 23	overview	
Nesselhauf Mine 2	overview	N
Frame 24	burnt spoil dump	S
Frame 25	burnt spoil dump	S

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24FR633

5.1 Site dimensions, how determined:

The site is non-contiguous along the face of a bluff. Besides the mine adits and coal spoil dumps there are the remains of coal delivery systems which brought coal off of the bluff to the valley floor. Mine 1 had one system and Mines 2 and 3 had another. Site area includes the area within which the mine adits, coal spoil dumps, roads to the mines and coal delivery systems are located.

	Dimensions	Area
Mine #1:	220 m N/S x 30 m E/W	2,000
Mine #2:	120 m N/S x 30 m E/W	1,800
	Total Area	3,800

5.2 Features:

The following describes the features at Mine 1 and this is followed by the features at Mines 2 and 3.

Mine 1: The features at Mine 1 consist of 1) an open adit which measures 2 m wide x 1.5 m high; 2) a road to the mine adit; 3) remains of a coal delivery system which took the coal down the bluff to the valley floor, 4) remains of a tipple at the bottom of the coal delivery system, 5) remains of a tipple at the mine adit; and 6) a coal spoil dump at the lower tipple. The road to the mine adit is 2 m wide and traverses the bluff's face down to the mine adit. There are actually two roads (see map). One ascends the bluff's face at a few degrees grade and the other is a much steeper grade. The most striking thing about this road system are the rock retaining walls that were built in order to stablize the road beds. The walls are random uncoursed rubble sandstone. Little remains of the coal delivery system (i.e., chute) - just an occasional board or plank. All that remains of the tipples are a few upright posts.

Mines 2 and 3: At mine adits 2 and 3 the features consist of an open adit (mine 2) which measures 2 m wide by 1.5 m high; a partially collapsed adit (mine 3); a road to the adits; a rather large coal spoil dump that has been burnt, a low retaining wall; and a railroad bed that terminates at the retaining wall.

5.3 Artifacts (observed, collected):

Mine 1: There are a few boards and planks.

Mine 2 and 3: At mines 2 and 3 in the area of the burnt coal spoil dump there are joints of 1-1/4" pipe, pieces of cable and pieces of 1 x 2 steel rail for mine car track.

5.4 Historical information and evaluation: See Attachment

5.5 References

Eike, Austen
1986 Personal communication, December 29, Forest Grove, Montana.

Payne, Gene F.
1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

Smith, Robert
1987 Personal communication, Janauary 13, Mesa, Arizona.

Tuss, Aton
1986 Personal communication, December 29, east of Lewistown, Montana.

5.6 Subsurface testing, results, methods, etc.:

None

5.4 Historical information and evaluation: (continued)

Mine 1 (see sketch map) was on Tom L. Apple's property and mines 2 and 3 were on federal land. Mr. Apple started the mines around 1920 (Robert Johnson 1986*). On October 19, 1921, John F. Brodie filed for a coal prospecting permit (GLO Serial No. Billings - #022761) on the government land on which mine 2 was located (GLO Records 1921). Mine 1 became known as the Apple Mine and Mine 2 was called the Brodie Mine.

A railroad spur from the Chicago, Milwaukee, St. Paul and Pacific Railroad was brought to the Brodie Mine. The spur was about one-half of a mile long. It went up the face of the bluff to where the ground begins to slope quite steeply. From the mine adit down to railroad spur a double mine car track was laid. This track was about 100 m in length and dropped in elevation some 40 m. One mine car was placed on one track and another on the other track. They were connected together by a cable that ran through two sheeves that were anchored at the head of the tracks. [Each cable may have been connected to a winch and the winches were placed in compound with each other. Informants Eike and Johnson could not remember for sure how the mechanism worked.] What was unique about this double track system was that the loaded mine car would hoist up the empty mine car and no auxiliary power was needed.

The Brodie Mine employed about eight to 10 men. A mule was used to pull the coal cars out of the mine until about 1930 (Johnson 1987). The mule was replaced by a hoist powered by a Dodge engine (Lerwill 1934). [The Lerwill 1934 letter is attached to the site form since it gives an excellent description of the mine.]

In 1928 Tom Apple began mining at the Brodie Mine. Apple obtained GLO license, Billings - #034102 to mine the coal. He opened up mine adit 3. By 1934 coal from the Roundup mine became readily available for the local market. The Roundup coal had far less sulphur, less clinker and was cheaper. It sold for $4.50 or less a ton. Mr. Apple stopped mining at the Brodie mine in 1934 (GLO Records; Eike 1986; Johnson 1987). The coal spoil dump in front the Brodie mine burned about 1939 (Johnson 1987).

There is far less information available on the Apple mine (mine adit 1 on sketch map). Tom Apple mined coal at the mine during the 1920s (Johnson 1987). Currently, at the base of the bluff adjacent to the road, there is a coal spoil dump and remains of a tipple. From the tipple up the mine, a distance of 180 m and an elevation change of 80 m, there is a 1 m wide area cleared of rocks with an occasional piece of a board or plank. This is the remains of a chute which was used to get the coal off the bluff rather than the double track/two mine car system used at the Brodie Mine (Tuss 1986).

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*Robert Johnson is the son-in-law of Tom L. Apple and worked for a year (1929) in the Brodie Mine.

Billings, Montana
April 21, 1934

Mr. H. I. Smith,
U. S. Geological Survey,
Washington, D. C.

Coal Prospecting Permit, Billings - 034102.

Dear Mr. Smith:

On March 25, 1934, I inspected coal prospecting permit, Billings - 034102, T. L. Apple, containing lands in Sec. 1, T. 14 N., R. 21 E., M. M.

This is an underground operation situated high in the rim rocks above Forest Grove Valley. The mine was opened in 1928 prior to the time Mr. Apple began his operations. The main slope is 100' north of the south line and 300' east of the west line of the forty. A second slope was opened by the permittee 100' from the main and is now extended 40'. The slope is on the approximate dip of the bed and its declination ranges from 18° to level near the face. No coal of any commercial quality was found until the slope had been developed 160' and the coal for the next 100' was very friable. The coal in the right bottom room is considered fair and a section taken at that face is as follows:

Roof......... Coal and bone	3' 0"
Carbonaceous dirt..........	1' 0"
Coal (friable).............	1' 5"
Coal.......................	2' 3"
Coal (slack)...............	0' 7"
Dirt.......................	0' 5"
Floor......................	Sandstone

The dirt and slack seam at the bottom of the bed is undermined by pick before the coal is shot down. In the room the coal is mined on a face 20' wide. The roof is timbered by a single row of props and waste from the mining forms a pack wall along the upper rib. The coal is hoisted to surface in cars operating on a steel track. The hoist is overhead at the mine entrance and is powered by a Dogge engine. The hoisting rope has a section of 5/8" and is in good condition. Next fall the permittee intends to develop the second slope for air. At this time there is no circuit for the air to travel. However, the air was good at the time of inspection.

A check of the permittee's records follows:

	Engineer's check	Permittee's report
1933		
Trespass to:		
10/13/33.......	270.96	No report.
Permit to:		
10/31/33.......	10.65	6.75
November.......	15.29	13.25
December.......	3.46	No report
1934		
January........	9.28	No report
February.......	0	No report

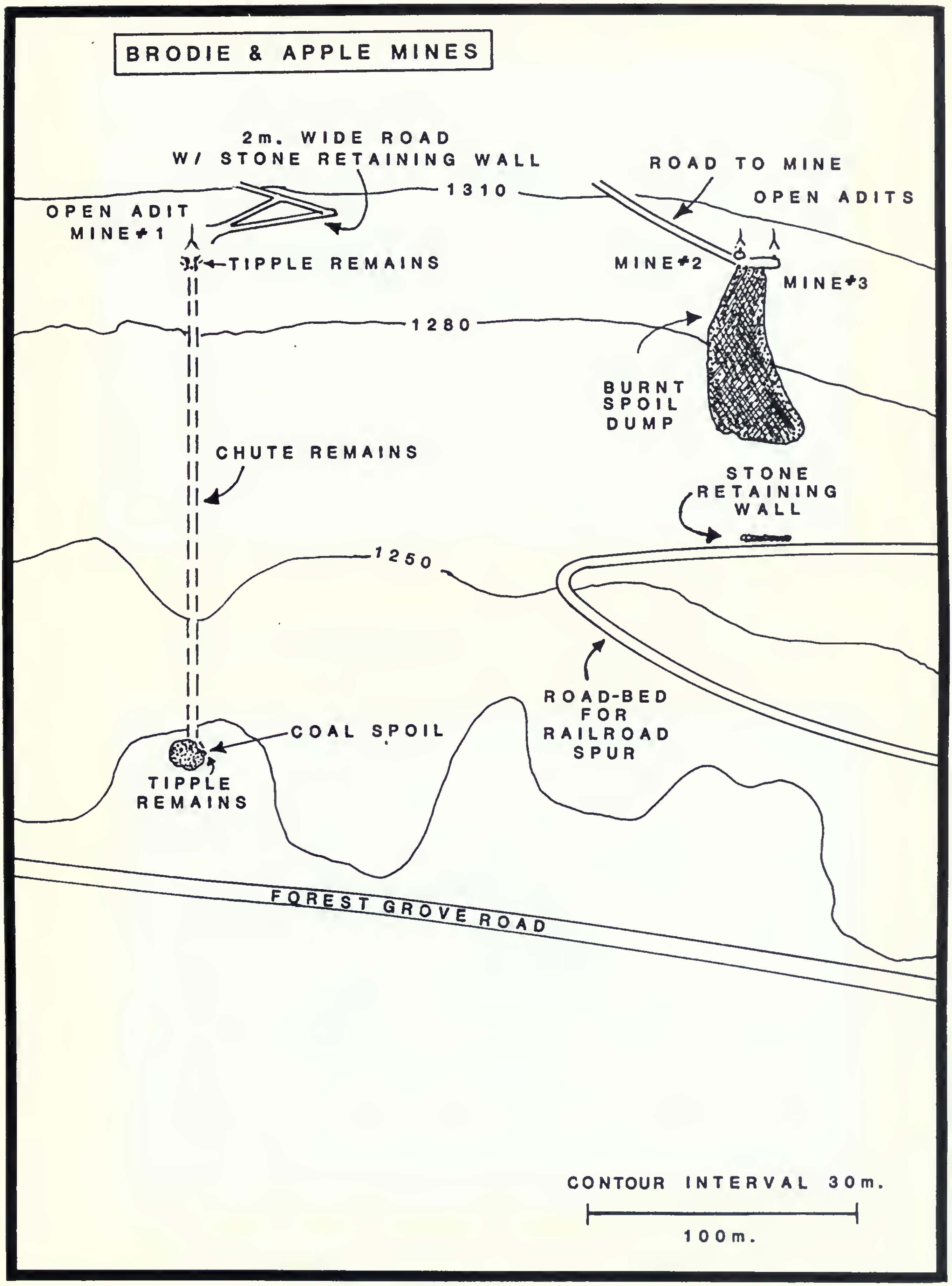
Mr. Apple has been advised of the necessity of submitting his reports regularly to this office. A correction appears on the quarterly report ended March 31, 1934 in accordance with this field check.

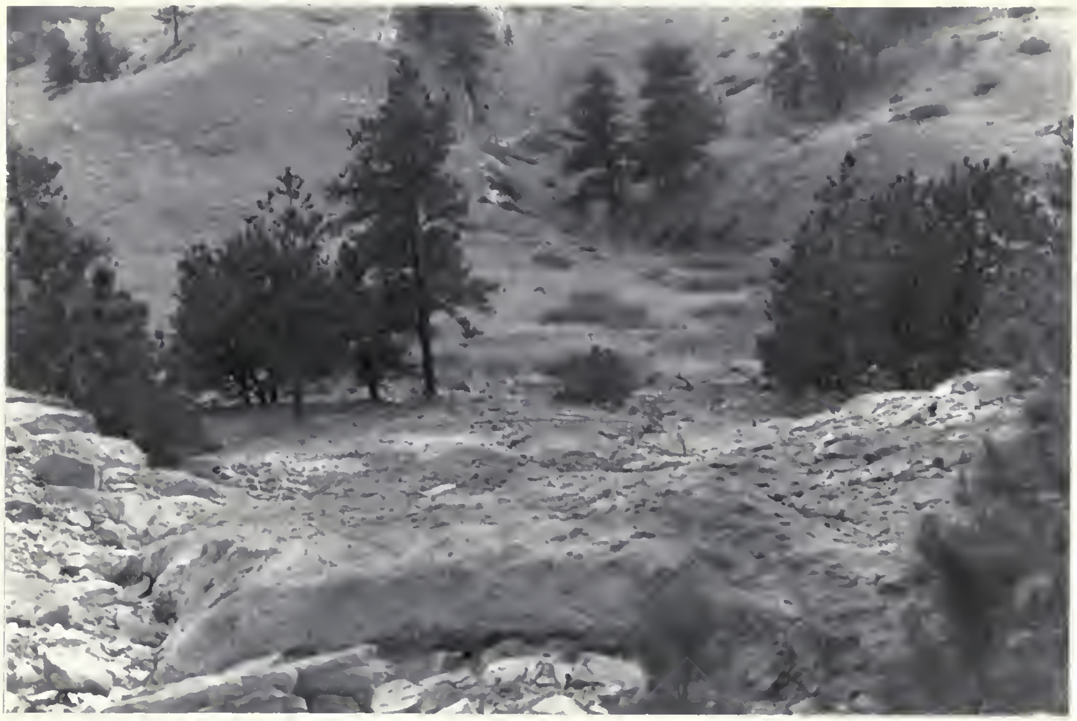
Attached is a sketch showing the extent of the workings and a profile taken along the slope.

Very truly yours,

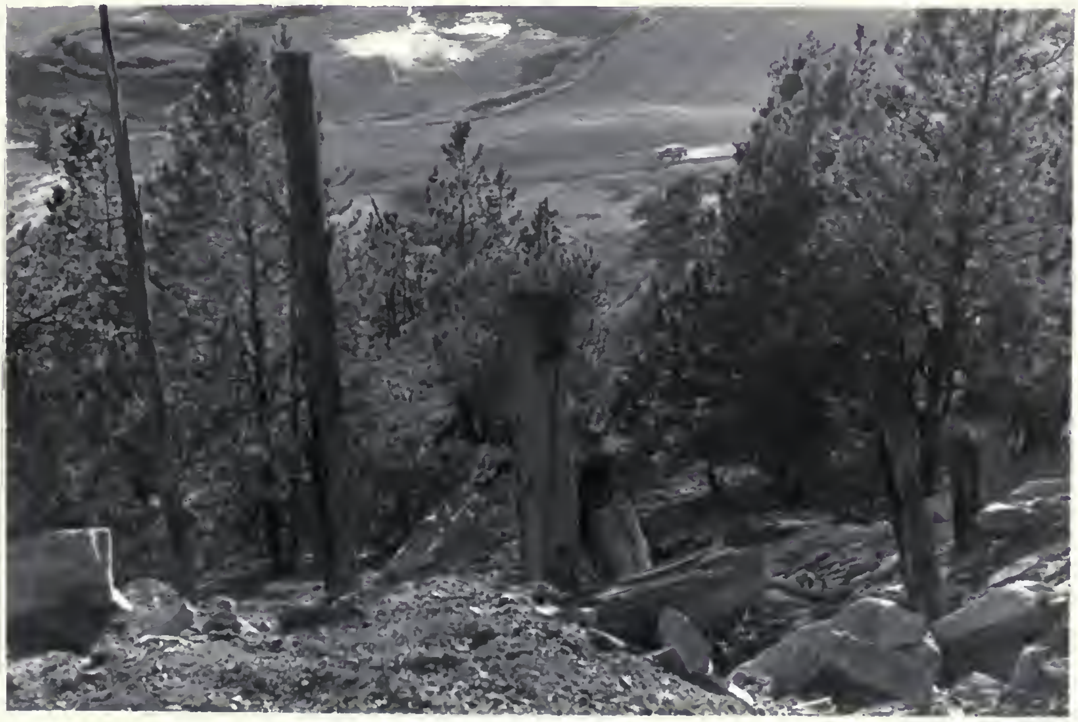
J. R. Lerwill.

BRODIE & APPLE MINES





View south showing where the mine car track came off the bluff at the Brodie Mine.



View south showing where the coal chute came off the bluff at the Apple Mine.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24FR634

1.2 Site name/field designation: Phillips Mine

1.3 County: Fergus

1.4 Township/range:

T 14 N R 21 E
NW 1/4 NE 1/4
NE 1/4 NW 1/4 NE 1/4 of Section 4
SE 1/4 NW 1/4

1.5 UTM:

Zone 12 647370 Easting 5207750 Northing

1.6 Site type: coal mine

1.7 Recording status & comments: mapped, photographed and recorded

1.8 Administrative/surface ownership:

David Wagner
Forest Grove, Montana

1.9 Mineral ownership:

1.10 Project name: Department of State Lands Abandoned Mine Reclamation Program

1.11 General narrative description of site:

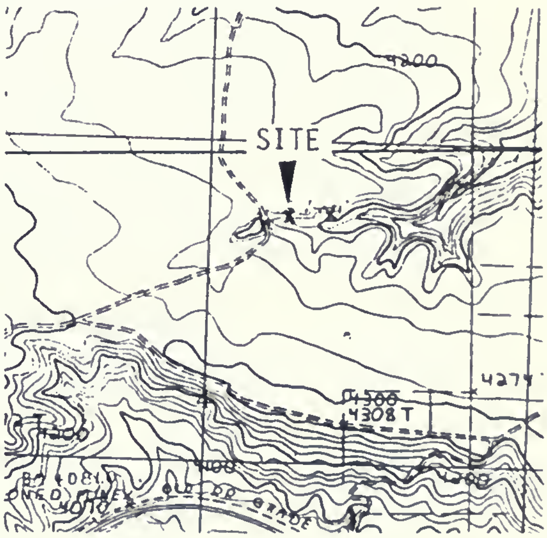
The site consists of three mine adits, associated coal spoil dumps and remains of two buildings.

1.12 Map reference: USGS Horsethief Coulee East, Montana, provisional edition 1985, 7.5 min quad.

1.13 City/town: ☒ vicinity of
Grass Range, Montana

1.14 Access to site:

Drive west out of Grass Range on the Forest Grove road for 15.5 miles to the Forest Grove turn off. Instead of turning south into Forest Grove turn north onto a trail. Follow this trail for about 1-1/2 miles to where the road crosses a small pond. The site begins about 100 m to the east.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24FR634

2.1 Geographic setting:

2.2 Elevation: 1255 m 4120 ft.

General: The site is on the northern edge of the foothills of the Big Snowy Mountains. The Plains begin a few miles to the north of the site.
Local: The site is near the head of a narrow coulee. The mine adits are in the coulee and the buildings are on the coulee's edge.

2.3 View/aspect:
View from the mine adits is limited to about .1 km at the most. At the buildings the view is to the south, east and west for about 1 km.

2.4 Major drainage:
McDonald Creek

2.5 Minor drainage(s):
unnamed tributary of McDonald Creek

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	unnamed tributary of McDonald Creek		within site	intermittent
b.				

2.7 Regional vegetation:
Eastern Montana Ponderosa Pine Forest (Payne 1973)

2.8 Local vegetation:
ponderosa pine, fir, aspen, wildrose, chokecherry and bluejoint wheatgrass

2.9 Soils:
sandy brown loam

2.10 Surface visibility/season of survey:
fair/winter

2.11 Other environmental factors pertaining to site location:
The site is within the Lewistown coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24FR634

3.1 Condition of site:
The structures at the mines have been destroyed. The dwelling structures are in ruins.

3.2 Site significance (NRHP):
The mines at this site, as well as the numerous mines in the area, played an important role in the development of Forest Grove, Grass Range and the surrounding area during the turn of this century. Therefore, the site meets Criterion A. However, since the site has been mostly destroyed and is in a state of ruins its integrity has been greatly impaired. The site is not recommended as potentially eligible for listing on the NRHP.

3.3 Impacts:
The Department of State Lands plans to close the mine openings, remove hazardous structures and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson Date: 12/28/86	3.6 Site recorded by: Gene Munson Date: 12/28/86	3.7 Revisions by: Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:
Government Land Office Records
1932 to 1934 Coal Lease Reports. U.S. Department of Interior, Bureau of Land Management, Billings, MT.
Munson, Gene 1987 A Cultural Resource Inventory and Evaluation of Selected Coal Mines and a Gold Mine Near Lewistown, Montana. For the Montana Department of State Lands. GCM Services, Inc., Butte.

3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St. Butte, MT 59702

3.12 Photos & accession No:

No. Phillips	Description	View
Frame 41	Mine 1 overview	N
Frame 42	Mine 1 adit	N
Frame 43	Mine 2 adit	N
Frame 44	buildings	N
Frame 45	buildings	N
Frame 46	buildings	N
Frame 47	overview	N

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24FR634

5.1 Site dimensions, how determined:
The site measures 100 m N/S x 180 m E/W. This is the area in which the mine adits, coal spoil dumps, buildings and artifacts are located.

15,000 m^2

5.2 Features:
The features at the site are described separately for each mine. The buildings are discussed separately from the mines.

Mine 1: The features at Mine 1 consists of an open mine adit which measures 1 m high (due to a pile of dirt) by 2 m wide; a coal spoil dump; a 3 m x 4 m leveled off place adjacent to the mine adit with boards from a collapsed shed; and the remains of a tipple (i.e., a few planks and upright posts).

Mine 2: The features at Mine 2 consists of an open mine adit which measures 1.5 m high x 2 m wide; and a coal spoil dump.

Mine 3: The features at Mine 3 consists of an open mine adit which measures 1.5 m high x 2 m wide; a coal spoil dump; a 3 m x 4 m leveled off place adjacent to the adit where presumably a shed was once located; and the remains of two upright posts which were probably part of a tipple.

There are the remains of two buildings across the coulee from the mines; a log structure and a frame structure.

Log Structure: The log structure has deteriorated until all that is left are parts of the walls. The ends of the logs are sawn and are V-notched. It measures 4 m N/S x 5 m E/W. The doorway is to the east.

Frame Structure: The roof and most of the walls have collapsed on this structure. The walls are made of 2 x 4 in studs with 1 x 8 to 1 x 12 in boards nailed horizontall on the outside. The floor is made of 2 x 6 in floor joists with one inch pine boards lain perpendicular to the floor joists. The foundation is unmortared sandstone. Except for the floors which are planed, the wood is rough sawn.

5.3 Artifacts (observed, collected):
Mine 1: There were no artifacts at Mine 1. Mine 2: There were no artifacts at Mine 2. Mine 3: Artifacts at Mine 3 consist of short pieces of 1 x 2 in steel rails for mine car tracks.

Buildings: The artifacts near the buildings consist of 1) a bed spring immediately east of the log structure, 2) axles from a large wagon that was pulled by draft animals located a few meters south of the log structure, 3) within the frame structure are the remains of a wooden table and a coal stove made by Quincy with patent dates of 1890 and 1910.

5.4 Historical information and evaluation: See attachment.

5.5 References

Eike, Austen 1986 Personal communication, December 29, Forest Grove, Montana.
Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricutural Experiment Station, Montana State University, Bozeman.

5.6 Subsurface testing, results, methods, etc.: None

5.4 Historical information and evaluation: (continued)

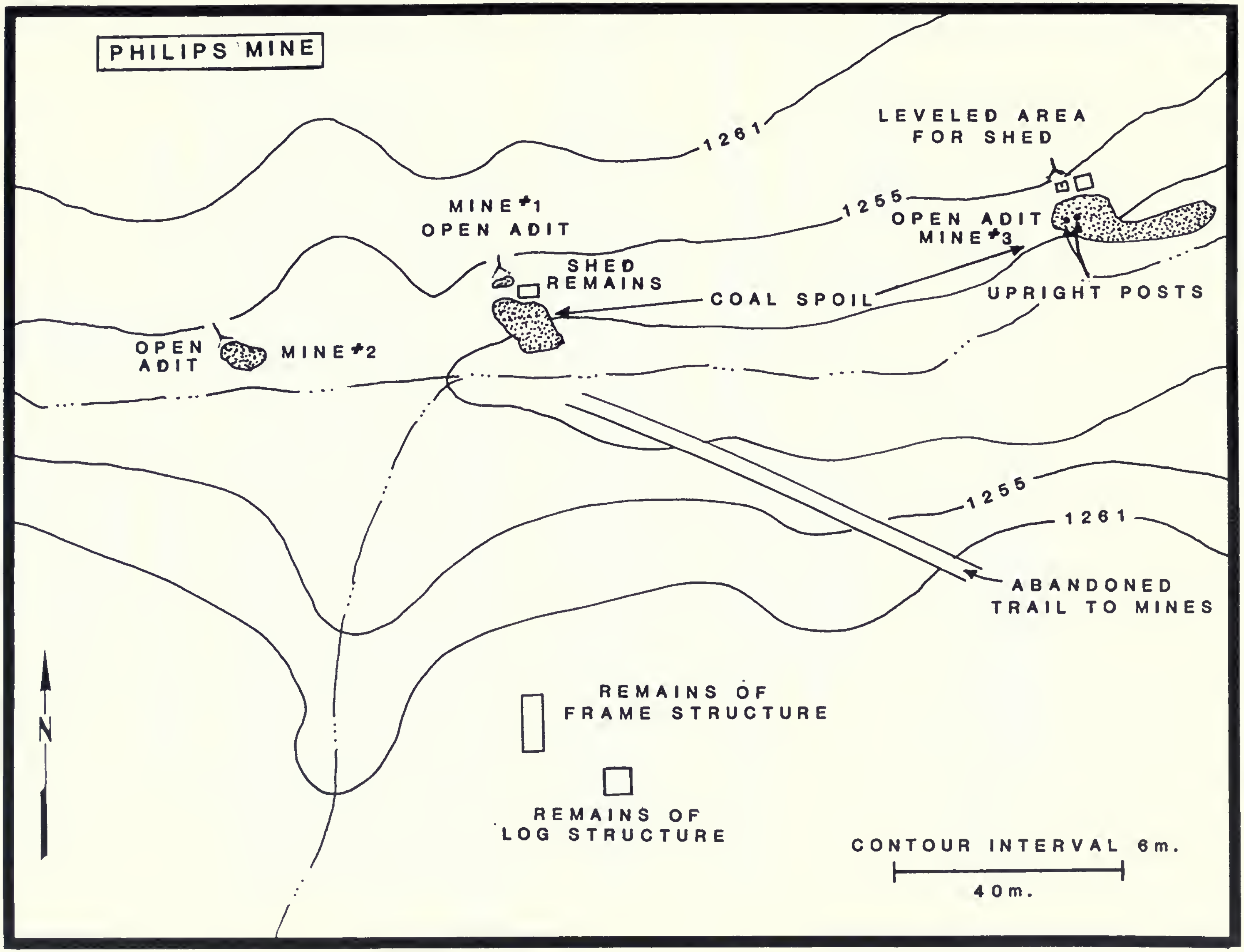
The following information about the mine was provided by Austin Eike and supplemented by information from the GLO records. Eike lived all his life life about 1/4 of a mile from the mine and he is currently in his 70's.

The mine was always a one man operation. The succession of people who mined it are Milton Phillips, Lawrence Salla, and William Flanigan. The buildings across from the mine were built by Milton Phillips in the late 1920s (Austin Eike 1985).

The coal at the Phillips mine was leased to Milton Phillips by the U.S. Department of Interior, General Land Office from April 14, 1926 to June 17, 1932 under lease number, Billings - #023162. The mine was operated for a short period of time by John Labor who applied for a lease December 16, 1932 [Eike,however, said he could not remember John Labor actually working the mine.] The lease was approved June 13, 1933 (serial number Billings - #034129). On August 8, 1933 a lease with the same serial number (Billings - #034129) was issued to William Flanigan. Since Flanigan did not pay royalities on the coal that he mined from September 1933 to Febraury 1934 the lease was terminated. The letter of lease termination was approved April 6, 1934 (Government Land Office Records 1932 to 1934).

On September 17, 1934 a cancelled lease inspection was made by R.H. Allport. He reported that a flood had removed the wagon scale and had done some damage to the tipple. At this time Flanigan was repairing the tipple and was appealing for the Land Office to reopen his case. Final rejection of his request to have his lease reinstated was May 11, 1935 (Government Land Office Records 1932 to 1934).

The attached letter by J. R. Lerwill describes the mine as of March 25, 1934. It includes a map of the workings. Based on the absence of timbers in adit 2 and the presence of timbers in adits 1 and 3 as of December 18, 1986, it is probable that adits 1 and 3 are what is shown in Mr. Lerwill's map of the mine. This assumption is based on the fact that the standard practice was to remove as many timbers as possible on an abandoned mine and reuse them. It is further supported by Eike who said the mine farthest down the coulee (adit 3) was operated by William Flannigan (Eike 1986).


PHILIPS MINE
LEVELED AREA FOR SHED
1261
1255
MINE #1 OPEN ADIT
OPEN ADIT MINE #3
SHED REMAINS
COAL SPOIL
UPRIGHT POSTS
OPEN ADIT
MINE #2
1255
1261
ABANDONED TRAIL TO MINES
N
REMAINS OF FRAME STRUCTURE
REMAINS OF LOG STRUCTURE
CONTOUR INTERVAL 6m.
40m.

315 Federal Building
Billings, Montana
April 23, 1934

Mr. H. I. Smith,
U. S. Geological Survey,
Washington, D. C.

Final Report
Coal Lease Application
Billings - 034129

Dear Mr. Smith:

On March 25, 1934, I inspected coal lease application, Billings 034129, William Flanagan, containing lands in Sec. 4, T. 14 N., R. 21 E., M. M.

This application was awarded on August 8, 1933 and finally rejected April 9, 1934. The land covered by the award was formerly leased by Milton Phillips under coal lease, Billings - 023162 and operated at a subsequent date by John Labor who applied for a lease under Serial number, Billings - 034129.

Since operated by Mr. Flanigan, the side entry has been extended and a room turned left. The latter has advanced 87' on a face 32' in width. The roof is supported by five rows of timbers spaced evenly. During the last 15' of advancement, water from the roof in addition to water already present at the floor has to some extent flooded the work and made roof conditions poor. The bed has a general dip to the north, being 5° and due to local rolls water pockets are to be found in the new room and a roll of considerable length along the indise end of the main entry accounts for the flooded condition there. This latter work could not be entered and extensions shown on the attached map are only approximatel At present, all work is confined to the side room. A small pump is operated at this location and is driven by a 32 volt motor located on the surface with wires suspended along the main entry.

A section of the bed taken at the room face follows:

Roof...........	Bone	1' 3"
Coal..................		2' 5½"
Bone......		0' 2"
Coal..................		0' 9"
Clay....		0' 1"
Coal and bone........		0' 9½"
Floor......		Shale

The bottom coal and clay parting is undermined and the coal is blasted with FFF black powder. It is loaded by shovel into a car of 1000# capacity and hoisted to surface. No help is employed by Mr. Flanigan and practically all coal mined is trucked to Lewistown, selling there

for $4.50 per ton.

From June 6, 1933 to August 8, 1933, the award date of the lease, the operator mined 30.83 tons for Mr. L-bor and was paid 50¢ per ton for his labor. No coal was, therefore, mined in trespass by Mr. Flanigan. Following is an account of the tonnage mined after the award.

1933

August 8 to August 30......	20.67
September.....	21.62
October....................	67.30
November..................	49.02
December..................	21.68

1934

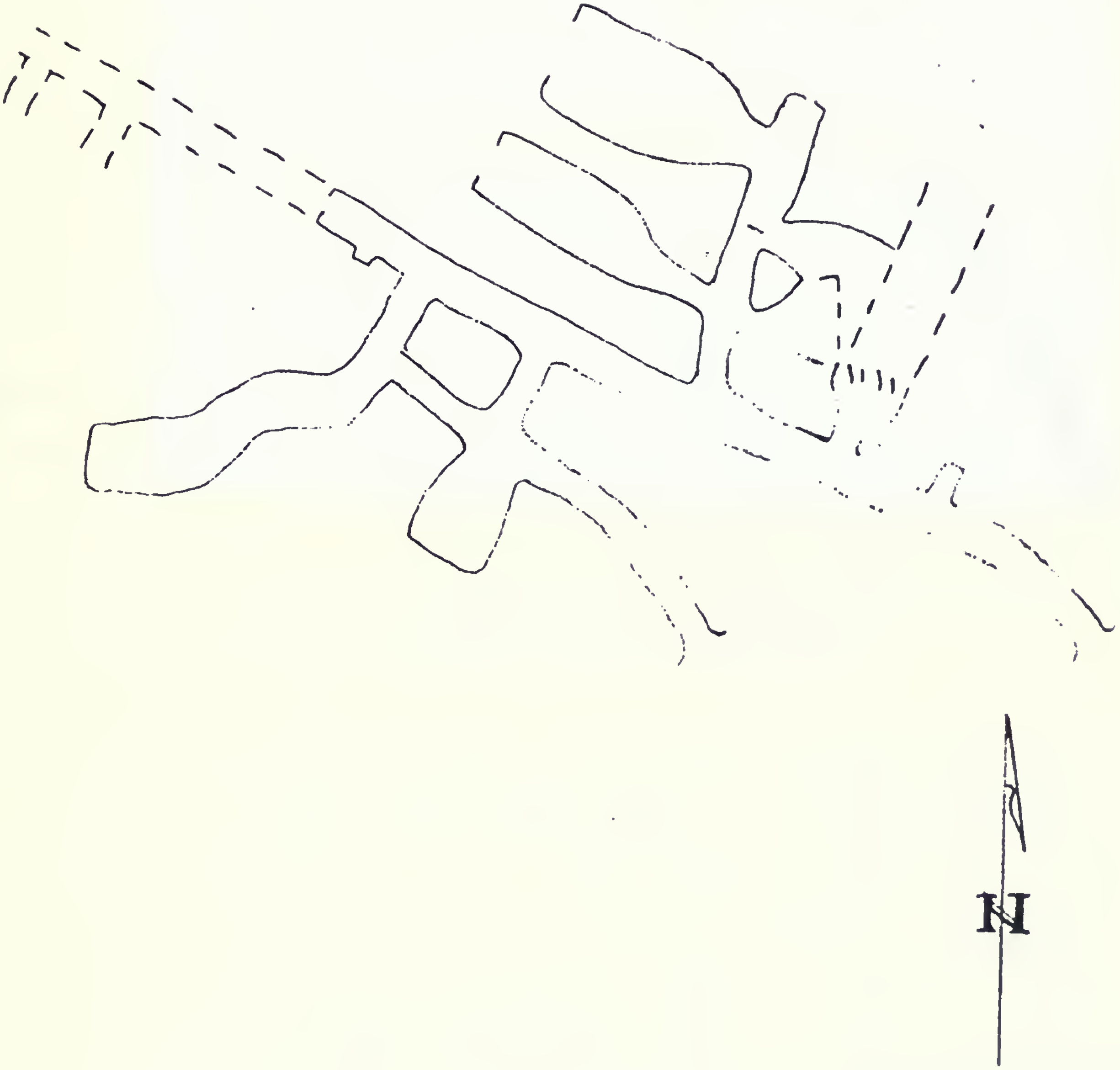
January....................	66.80
February.......	25.83

The above tonnage appears as a correction on the quarterly report ended March 31, 1934.

Attached is a sketch of the workings.

Very truly yours,

J. B. Lorwill.



BILLINGS - 034129
Wm. Flanigan.
NW¼NE¼, Sec.4,
T.14 N., R.21 E.M.M.

1"-50'   3/25/34.

Phillips Mine #1 (view north).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24FR635	1.2 Site name/field designation: Swanson Mine Complex	1.3 County: Fergus

1.4 Township/ range:

see attachment

1.5 UTM: See Attachment.

Zone__________ __________ Easting __________ Northing

1.6 Site type: coal mine	1.7 Recording status & comments: mapped, photographed and recorded

1.8 Administrative/surface ownership:

Mines in Section 10 are on the property of William, Swanson, Lewistown, Montana
Mines in Section 15 are on the property of Mildred Smith, Lewistown, Montana

1.9 Mineral ownership:
Section 10: Federal
Section 15: Smith

1.10 Project name:
Department of State Lands Abandoned Mine Reclamation Program

1.11 General narrative description of site:

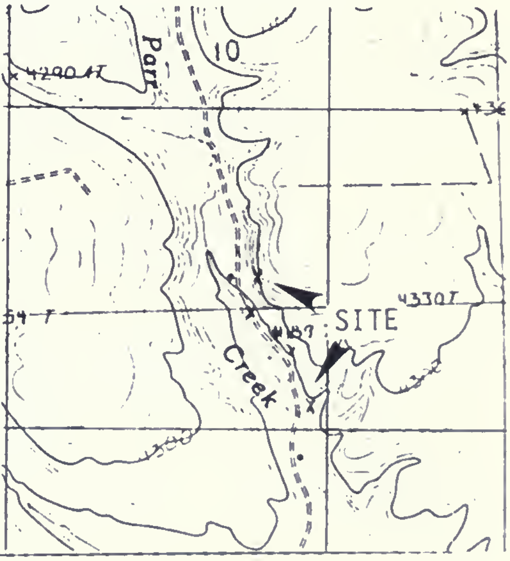
The site consists of six collapsed to almost entirely collapsed mine adits that are located on the west face of a ridge located adjacent to Parr Creek. At mines 1, 2 and 4 all that remains is coal spoil. At mines 3 and 6, besides coal spoil, there are the partial remains of two tipples, with the tipple at mine 6 being the most intact.

1.12 Map reference:
U.S.G.S. Horsethief Coulee West, Montana, Provisional edition 1985, 7.6 min. quad

1.13 City/town: ☒ vicinity of
Lewistown, MT

1.14 Access to site:

Take U.S. Highway 87 east out of Lewistown for 12 miles. Here an improved dirt road intersects the highway from the north. Follow this road for 1/2 mile to the mines. They are along the road.



MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24FR635

2.1 Geographic setting:

2.2 Elevation: 1286 m 4220 ft.

General: The site is in the foothills of the Judith Mountains. These mountains rise abruptly out of the surrounding plains.

Local: The site is on the west face of a north/south trending ravine. Parr Creek flows through the ravine and is 50 m to 100 m from the site.

2.3 View/aspect:

The view is limited to the area within the ravine and this is .3 km at the most. The view is westerly.

2.4 Major drainage:
McDonald Creek

2.5 Minor drainage(s):
Parr Creek

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	Parr Creek	50-100 m	12 m	intermittent
b.				

2.7 Regional vegetation:
Ponderosa Pine Savannah (Payne 1973)

2.8 Local vegetation:
ponderosa pine, chokecherry, wildrose, aspen, timothy grass, blue joint wheatgrass, and brome

2.9 Soils:
thin brown loam

2.10 Surface visibility/season of survey:
good/winter

2.11 Other environmental factors pertaining to site location:
The site is located within the Lewistown coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24FR635

3.1 Condition of site:
Mines 1, 2 and 3 are destroyed; mine 3 is in ruins; and mine 6 is deteriorated.

3.2 Site significance (NRHP):
These mines, as well as, the numerous other mines in the area played an important role in the development of central Montana around the turn of this century. Therefore, it meets Criterion A. However, since the condition of the property ranges from being destroyed to that of being badly deteriorated, its integrity has been greatly impaired. The site is not recommended as potentially eligible for listing on the NRHP.

3.3 Impacts:
The Department of State Lands plans to close the mine openings, remove hazardous structures and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson Date: 12/23/86	3.6 Site recorded by: Gene Munson Date: 12/23/86	3.7 Revisions by: Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:
GLO Records
1928-1970 U.S. Department of Interior, Bureau of Land Management, Government Land Office Records, Billings.
Munson, Gene 1987 A Cultural Resource Inventory and Evaluation of Selected Coal Mines and a Gold Mine Near Lewistown, Montana. For the Montana Department of State Lands. GCM Services, Inc., Butte.

3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St. Butte, MT 59702

3.12 Photos & accession No:

No.	Description	View
Mine 1 - frame 10	overview	E
Mine 2 - frame 11	overview	SE
Mine 3 - frame 12	overview	NE
Mine 4 - frame 13	overview	E
Mine 5 - frame 14	overview	NE
Mine 6 - frame 15	overview	E
Mine 6 - frame 16	discarded engine	N
Mine 6 - frame 17	hoisting unit	NE
Mine 6 - frame 18	top of tipple	SW
Mine 6 - frame 19	front of tipple	NE
Mine 6 - frame 20	front of tipple	NW

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24FR635

5.1 Site dimensions, how determined:
See attachment.

______________ m^2

5.2 Features:
Mine 1: The features at Mine 1 consist of a small coal spoil dump (10 m - 20 m in size) and a collapsed mine adit. Mine 2: The features at Mine 2 also consist of a small coal spoil dump (8 m - 15 m in size) and a collapsed mine adit. Mine 3: Features at Mine 3 consist of a small coal spoil dump (20 m - 30 m in size), a collapsed adit and the remains of a tipple. The tipple is in a state of ruins being almost entirely collapsed. It was constructed of poles set into the ground with rough sawn 2 inch thick planks for cross members. It probably measured about 2 m in width and was perhaps 15 m in length. The overall construction was quite simple and would not have taken a great deal of time, effort or expense. The mine adit was above the tipple so the tracks would have been on an incline down to the tipple. Mine 4: The features at Mine 4 consist of a small coal spoil dump (10 m - 15 m in size) and an adit that is almost totally collapsed. Mine 5: The features at Mine 5 consist of a small coal dump (10 m - 15 m in size) and a collapsed mine adit. Mine 6: Mine 6 consists of a partially collapsed mine adit, a small coal spoil and waste rock dump, and a tipple. The tipple is in better condition than the one at Mine 3. It is of similar construction, i.e., upright poles with plank cross members, but is wider. It is over 3 m in width. Unlike the adits at the other five mines, the adit for Mine 6 is in the bottom of a coulee. This made it necessary to place an inclined track up from the mine to the tipple. A gasoline powered/hoist was used to pull the coal cars up this incline and a four cylinder Chevrolet engine and transmission from a car or truck was used to power the hoist. Behind the transmission a drum for the cable was mounted. The hoist was apparently fabricated at a local machine shop.

5.3 Artifacts (observed, collected):
See attachment.

5.4 Historical information and evaluation:
See attachment.

5.5 References
Swanson, William Jr.
1987 Personal communication, January 19, east of Lewistown, Montana.
Payne, Gene F.
1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

5.6 Subsurface testing, results, methods, etc.
None

1.4 Township/range: (continued)

Site No.: 24FR635

T15 N R 20 E

Mine 1 - SW1/4 SW1/4 SE1/4 Section 10
Mine 2 - SW1/4 SW1/4 SE1/4 Section 10
Mine 3 - NW1/4 NW1/4 NE1/4 Section 15
Mine 4 - NE1/4 NW1/4 NE1/4 Section 15
Mine 5 - SE1/4 NW1/4 NE1/4 Section 15
Mine 6 - SE1/4 NW1/4 NE1/4 Section 15

1.5 UTM: (continued)

Zone 12

	Easting	Northing
Mine 1	638750	5214500
Mine 2	638780	5214420
Mine 3	63800	5214350
Mine 4	638900	5214220
Mine 5	638920	5214120
Mine 6	638980	5214080

5.1 Site dimensions, how determined: (continued) Site No.: 24FR635

The site is non-contiguous along a .5 km section of the west face of the Parr Creek ravine. The following is the area covered by each of the mines. The area of each mine includes the features and artifacts, if present.

Mine 1:	15 m N/S x 35 m E/W	Area:	300 m^2
Mine 2:	8 m N/S x 25 m E/W	Area:	160 m^2
Mine 3:	50 m NE/SW x 25 m NW/SE	Area:	800 m^2
Mine 4:	8 m N/S x 20 m E/W	Area:	160 m^2
Mine 5:	15 m N/S x 20 m E/W	Area:	200 m^2
Mine 6:	25 m NW/SE x 75 m NE/Sw	Area:	1200 m^2
		Total Area	2820 m^2

5.3 Artifacts (observed, collected): (continued) Site No.: 24FR635

Mines 1 and 2 did not contain any artifacts.

Mine 3 had several 1 x 2 in iron rails scattered around, the remains of a coal cart, part of a straight radial blade fan which probably was used for delivering air into the mine, and a coal screen made of angle iron. The angle iron coal screen was made by placing the 1 in angle iron so that the angle faced the top of the screen, i.e., end view. They were spaced about 1 in apart.

Mine 4 also had the remains of a coal screen. It was constructed of 5/8 in steel rods nailed perpendicular to two wooden 2 x 4's. The rods were spaced about 1 in apart.

Mine 6 contained 1 x 2 in iron rails, a hoisting unit (described in Section 5.2), an extra engine and a coal cart.

5.4 Historical information and evaluation: (continued)

All of these mines were small wagon mines which employed one to four men (generally, one to two miners). The coal in Section 10 is owned by the federal government and the records at the Bureau of Land Management, Billings, for these mines are fairly complete. The following discusses each of the mines individually. The mine numbers used below are based on those used on the attached sketch map of the mine locations.

Mine 1: This mine and the other two mines in Section 10 are known locally as the Swanson Mines. William Swanson Sr. owned and operated them. Mine 1 was mined from 1928 to 1930 under GLO prospecting permit, Billings - #029447. The mine extended about 175 ft back into the hillside (see sketch). Swanson employed one man in which he paid $2.00 per ton of coal. The coal sold for $4.00 per ton at the mine. A steel track of eight pound steel and eighteen inch gauge was used to haul the coal with a 800 pound car to a small tipple. Since the coal seam was quite level it was possible to push the car by hand out of the mine. The coal seam was about 3 ft thick. During the winter months coal production peaked around 90 tons per month with yearly averages of around 30 tons (GLO Records 1928-1970; Swanson 1987).

Mine 2: Mine 2 was begun in 1930 under GLO prospecting permit - Billings #029447- but the coal seam was poorly developed. The mine extended about 130 ft back into the hillside (see mine sketch map). It was abandoned in 1931 (GLO Records 1928-1970).

Mine 3: This mine was begun in 1933 under GLO prospecting permit, Billings - 034324. In 1938 GLO coal lease, Billings - #037867 was issued for the mine. The lease was held until 1970. Coal production actually stopped in 1966. Apparently, this is the last coal mine to operate in Fergus County. During the last years only a few tons per year were mined. Most of the coal was for personal use along with small sales to a few local ranchers.

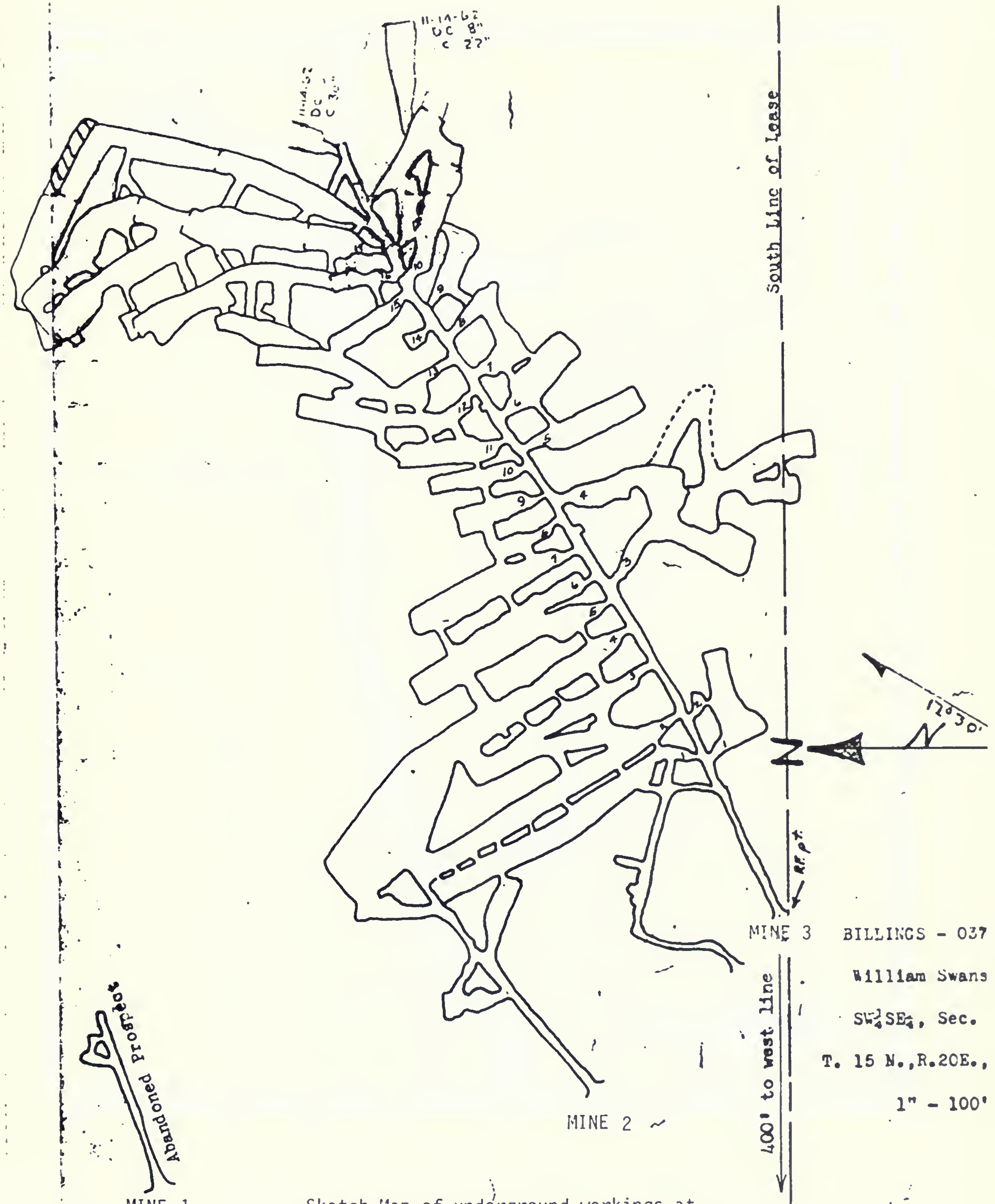
The mine extended about 1300 ft back into the hillside (see sketch of mine). There was one air shaft. An 800 pound coal car was used to haul the coal out of the mine. Rarely were draft animals used to pull the car, since it was usually pushed out by hand. Several years ago, William Swanson, Jr. collapsed the mine openings at Mines 1, 2 and 3 (Swanson 1987 and GLO Records 1928-1970).

Mine 4: Joe Plovanich, Sr. operated this mine from 1930 to 1937. It remained through its life span as a small-scale operation (Swanson 1987).

Mine 5: This mine was started in 1912 by John Sharp. At the same time his brothers, Alex and William started a coal mine 10 miles to the west (24FE). John Sharps mine was opened for sales to the Great Northern Railroad which was constructing a railroad a few miles to the south. The railroad was to run from Lewistown to Winnett but was never completed. The mine probably only operated a year or two (Swanson 1987).

Mine 6: This mine is known as the Smith Mine after Clarence Smith who owned the mine and the property it was located on. William Swanson, Jr. generally operated the mine and employed up to four people. The mine opened in 1938

and was shut down in 1963. It extended 1300 ft back into the hillside and had one ventillation shaft. A cable hoist was used to pull the coal out of the mine and up to the tipple. The mine averaged about 100 tons per year until the last years of operation when only a few tons per year were sold (Swanson 1987).



BILLINGS - 037

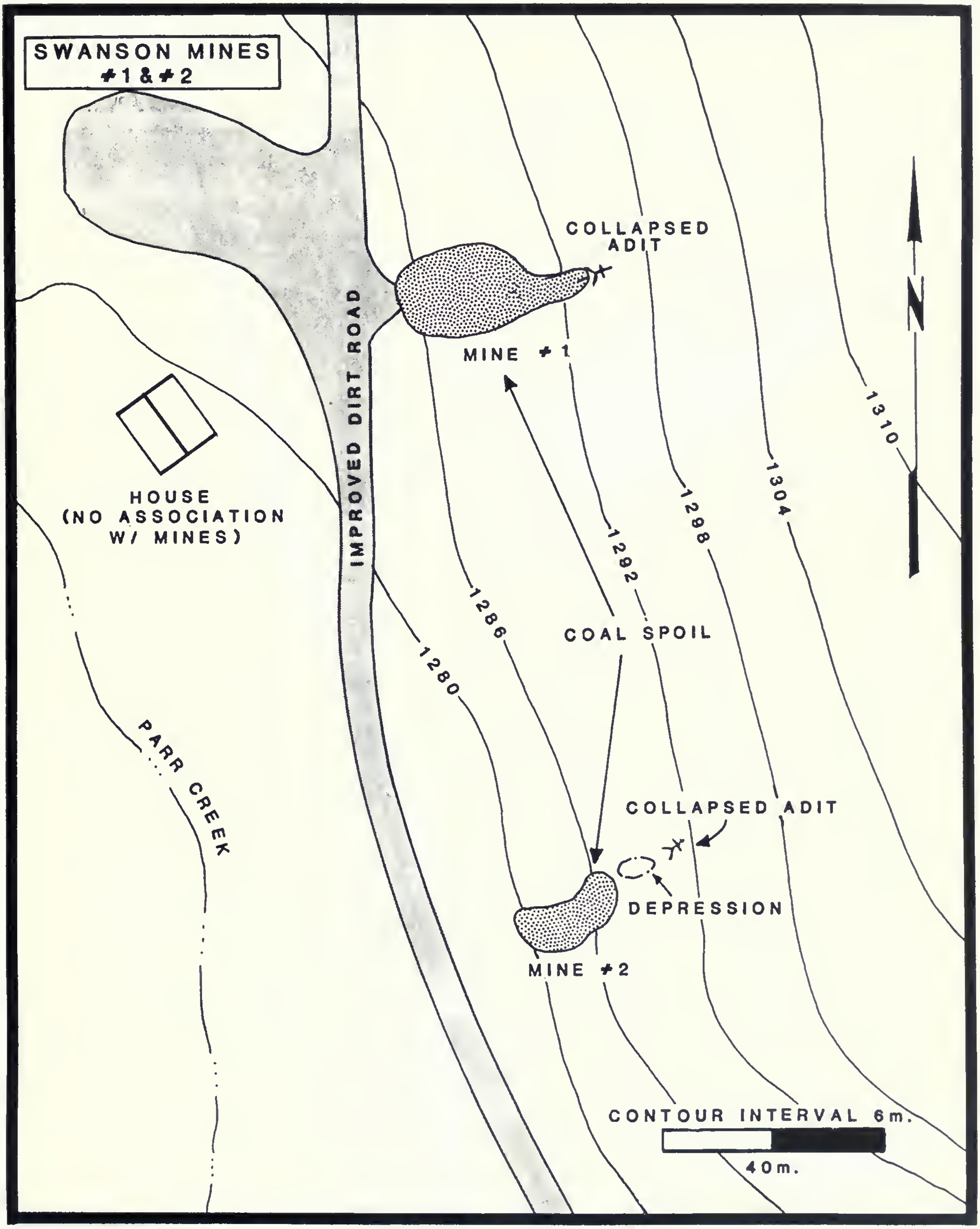
William Swans

SW¼SE¼, Sec.

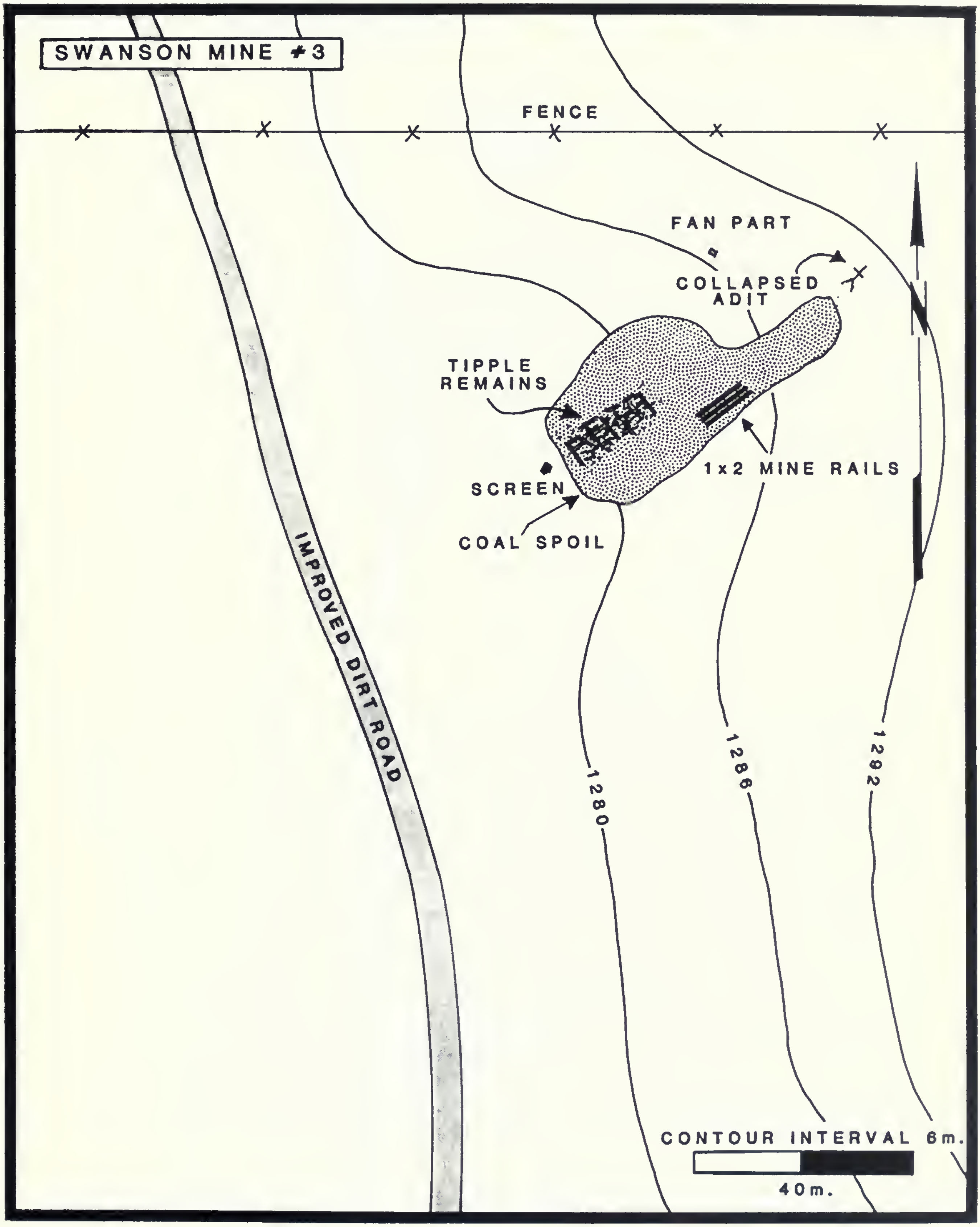
T. 15 N., R.20E.,

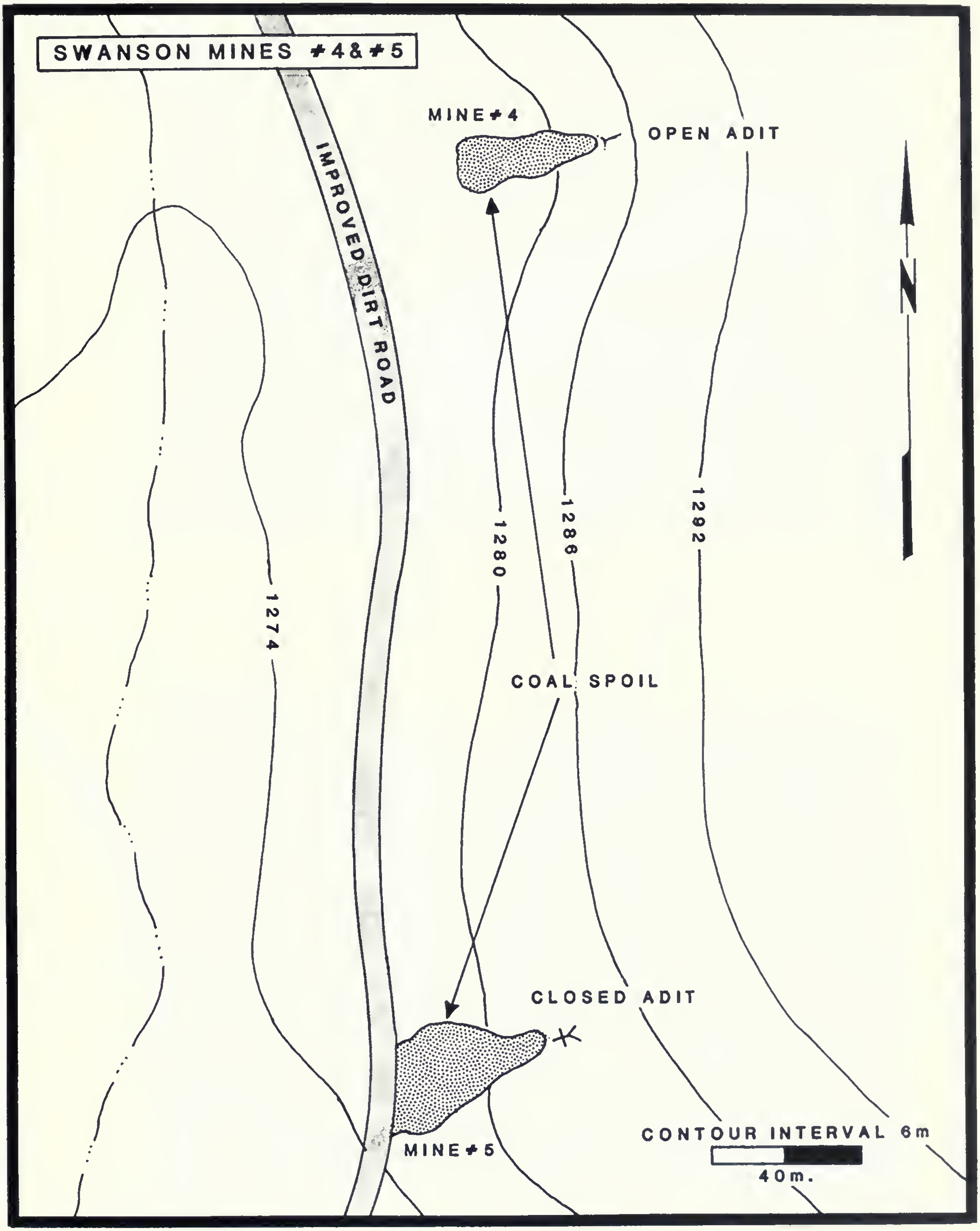
1" - 100'

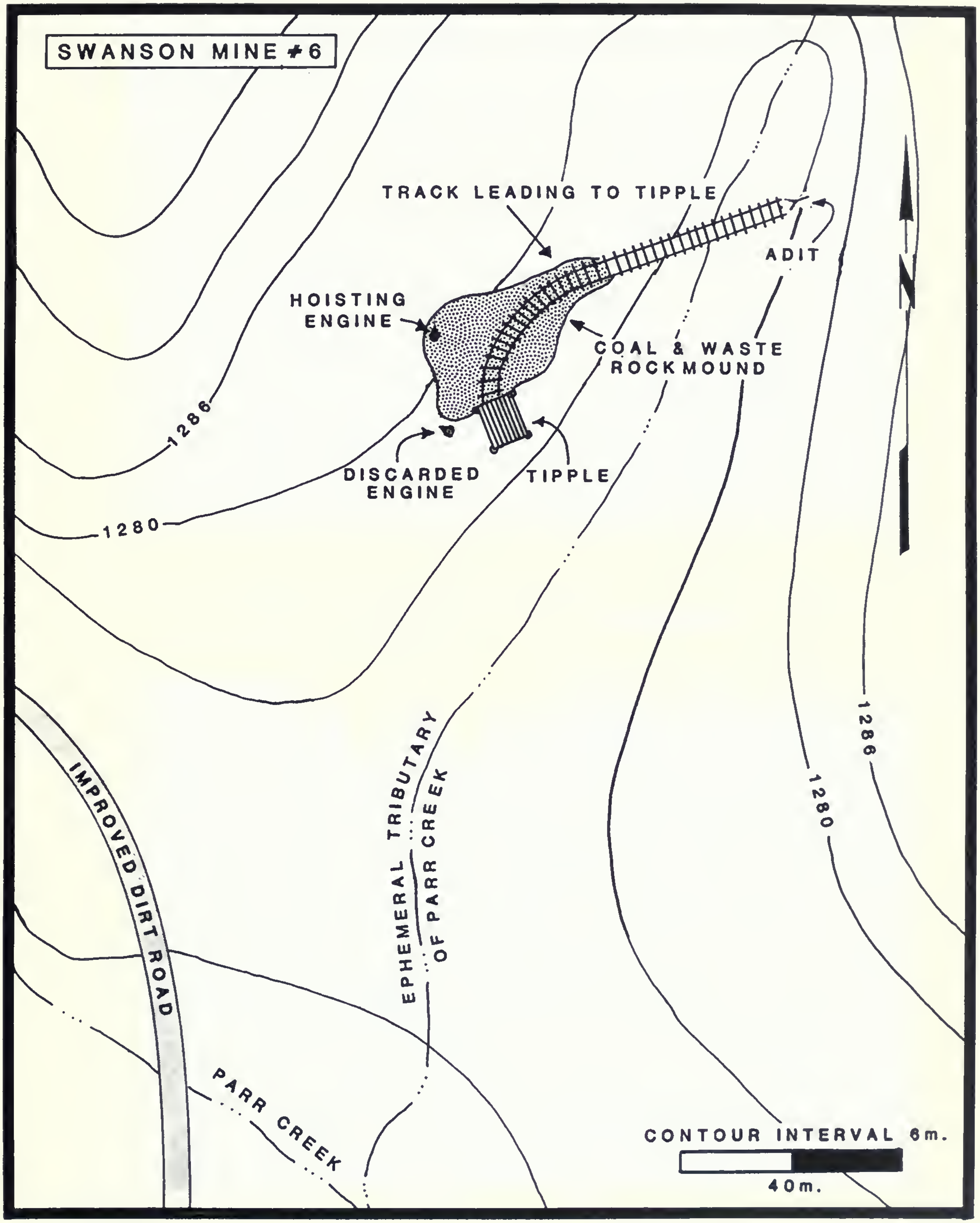
Sketch Map of underground workings at Mines 1, 2, and 3 (GLO Records 1923-1970).

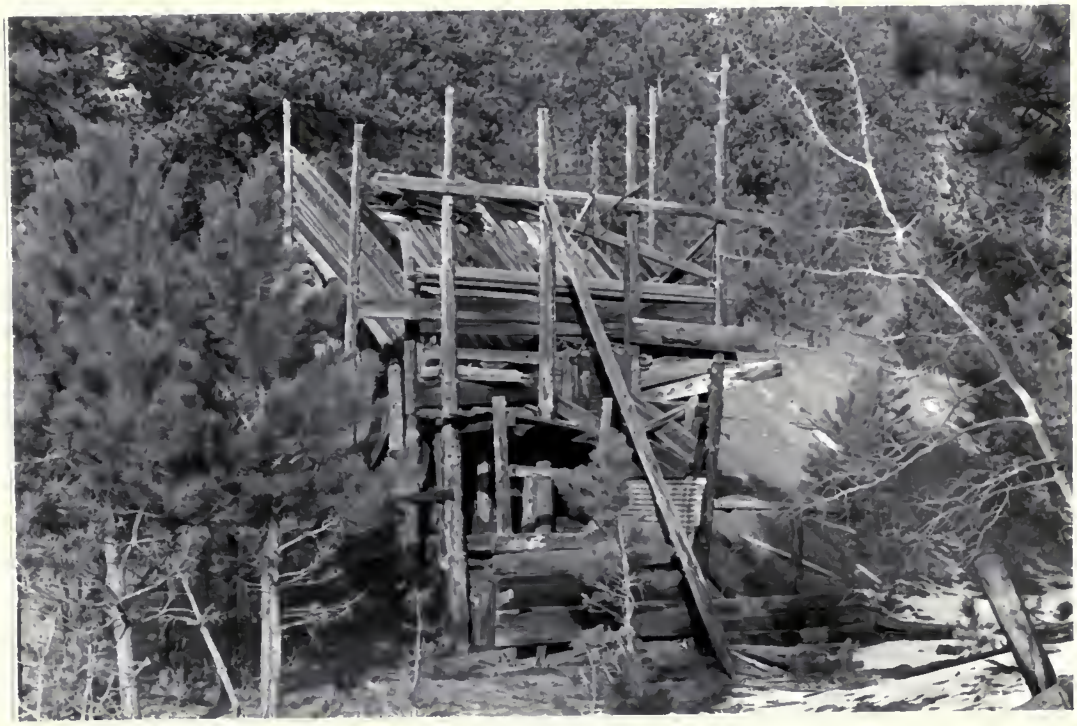


SWANSON MINES
#1 & #2
COLLAPSED ADIT
MINE #1
IMPROVED DIRT ROAD
HOUSE (NO ASSOCIATION W/ MINES)
PARR CREEK
COAL SPOIL
COLLAPSED ADIT
DEPRESSION
MINE #2
N
1280
1286
1292
1298
1304
1310
CONTOUR INTERVAL 6m.
40m.


SWANSON MINE #3
FENCE
FAN PART
COLLAPSED ADIT
TIPPLE REMAINS
SCREEN
COAL SPOIL
1x2 MINE RAILS
IMPROVED DIRT ROAD
1280
1286
1292
CONTOUR INTERVAL 6m.
40m.


SWANSON MINES #4&#5
MINE #4
OPEN ADIT
IMPROVED DIRT ROAD
1274
1280
1286
1292
COAL SPOIL
CLOSED ADIT
MINE #5
N
CONTOUR INTERVAL 6m
40m.


SWANSON MINE #6
TRACK LEADING TO TIPPLE
ADIT
HOISTING ENGINE
COAL & WASTE ROCKMOUND
DISCARDED ENGINE
TIPPLE
1286
1280
1286
1280
N
IMPROVED DIRT ROAD
EPHEMERAL TRIBUTARY OF PARR CREEK
PARR CREEK
CONTOUR INTERVAL 6m.
40m.



Tipple at Swanson mine #6 (view northeast).

Hoisting unit at Swanson mine #6 (view northeast).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24FR636	1.2 Site name/field designation: Cowen	1.3 County: Fergus

1.4 Township/range:
Entries in mine Area 1: SE1/4 SE1/4 Section 8
SW1/4 SW1/4 SW1/4 Section 9
Adits:
NE 1/4
T 15N R 20E SW 1/4 NE 1/4 NE 1/4 of Section 17
SE 1/4

1.5 UTM:
Mine area 3 - 63670 - 5214100
Mine area 2 - 636100 Easting - 5213250 Northing
Mine area 1 - 636100 - 5213900
Zone 12

1.6 Site type: coal mine	1.7 Recording status & comments: mapped, photographed and recorded

1.8 Administrative/surface ownership: Richard and Rosemary Kock east of Lewistown, Montana	1.9 Mineral ownership: Federal (Section 17 & 9) Private (Section 8)
	1.10 Project name: Department of State Lands Abandoned Mine Reclamation Program

1.11 General narrative description of site:

The site consists of seven mine adits and associated coal spoil dumps located on the west face of a finger ridge.

1.12 Map reference:
USGS Horsethief Coulee West, Montana, Provisional edition 1985, 7.5 Min Quad

1.13 City/town: ☒ vicinity of
Lewistown, Montana

1.14 Access to site:
Drive east out of Lewistown on U.S. Highway 87 for 10 miles. The mines are located on the northside of the highway. Mine Area 1 is adjacent to the road.

Section of USGS Quad showing location of site

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24FR636

2.1 Geographic setting:

2.2 Elevation: 1329 m 4360 ft.

General: The site is located in the foothills of the Judith Mountains. These mountains rise out of the surrounding plains.
Local: The site is on the west face of a finger ridge. An unnamed tributary of the North Fork of McDonald Creek is located 150 m to the west.

2.3 View/aspect:
The view is to the west for 1 km.

2.4 Major drainage:
North Fork McDonald Creek

2.5 Minor drainage(s):
unnamed tributary of the North Fork of McDonald Creek

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	unnamed tributary of the North Fork	100 m	18 m	intermittent
b.	of McDonald Creek			

2.7 Regional vegetation:
Lodgepole pine - Douglas Fir Forest (Payne 1973)

2.8 Local vegetation:
ponderosa pine, fir, aspen, chokecherry, timothy, brome, bluejoint wheatgrass

2.9 Soils:
brown loam

2.10 Surface visibility/season of survey:
fair/winter

2.11 Other environmental factors pertaining to site location:
The site is within the Lewistown coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24FR636

3.1 Condition of site:
The site has been destroyed.

3.2 Site significance (NRHP):
These mines as well as the numerous other mines in the area played an important role in the development of Central Montana and, therefore, meet Criterion A. However, since the remains at the mines have been destroyed the site lacks integrity. The site is not recommended as potentially eligible for listing on the NRHP.

☐ Attachments:

3.3 Impacts:
The Department of State Lands plans to close the mine openings, remove hazardous structures and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson Date: 12/24/86	3.6 Site recorded by: Gene Munson Date: 12/24/86	3.7 Revisions by: Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:
Deal, Babbie and Loretta McDonald, editors
1976 The Heritage Book of Central Montana. The family histories of the William P. Cowen and Willie J. Cowen familes, pp. 588-589.
Munson, Gene 1987 A Cultural Resource Inventory and Evaluation of Selected Coal Mines and a Gold Mine Near Lewistown, Montana. For the Montana Department of State Lands. GCM Services, Inc., Butte.

3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St. Butte, MT 59702

3.12 Photos & accession No:

No.	Description	View
Cowen Section 17		
Frame 29	Mine 1 overview	E
Frame 30	Mine 2 and 3 overview	E
Frame 31	Mine 4 overview	E
Frame 34	Mine 5 overview	NE

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24FR636

5.1 Site dimensions, how determined:
The site is noncontiguous along the face of a finger ridge. There are three areas in the site. Area 1 is at mine adits 5, 6 and 7; Area 2 is at mine adit 1 and Area 3 is at mine adits 2, 3 and 4. Within these areas are located the features and artifacts found at the site.

	Dimensions	Area
Area 1:	40 m N/S x 50 m E/W	2000 m^2
Area 2:	15 m N/S x 20 m E/W	200 m^2
Area 3:	70 m N/S x 50 m E/W	3500 m^2
	Total Area	5700 m^2

5.2 Features:
Area 1: The features in Area 1 include three mine adits (two of which are collasped and one which is open); and a coal spoil dump.
Area 2: The features in Area 2 include a collapsed mine adit; and a coal spoil dump.
Area 3: The features in Area 3 include three collapsed mine adits, three coal spoil dumps and the remains of two tipples. All that is left of the two tipples are a few upright posts.

5.3 Artifacts (observed, collected):

Area 1:	No artifacts.
Area 2	Remains of a coal cart.
Area 3:	Truck frame, bedsprings, stove remains and tin cans.

5.4 Historical information and evaluation:

See attached.

5.5 References

Kosa, Bill
1987 Personal communication, January 19, 1987, Lewistown, Montana.
Payne, Gene F.
1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.
GLO Records
1933-1938 U.S. Department of Interior, Geological Survey, Report of Royalties and Rentals, Bureau of Land Management, Billings.

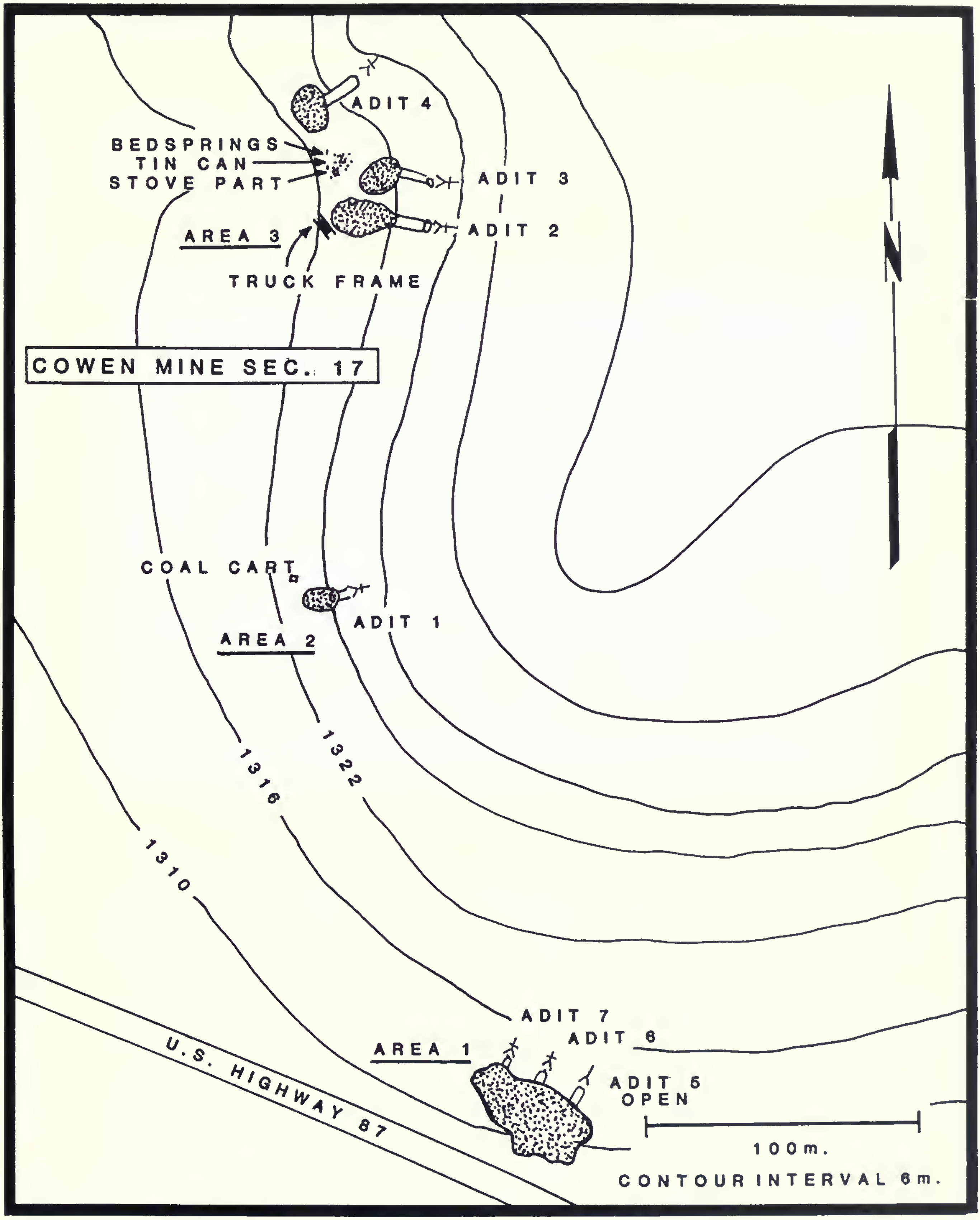
5.6 Subsurface testing, results, methods, etc.
None

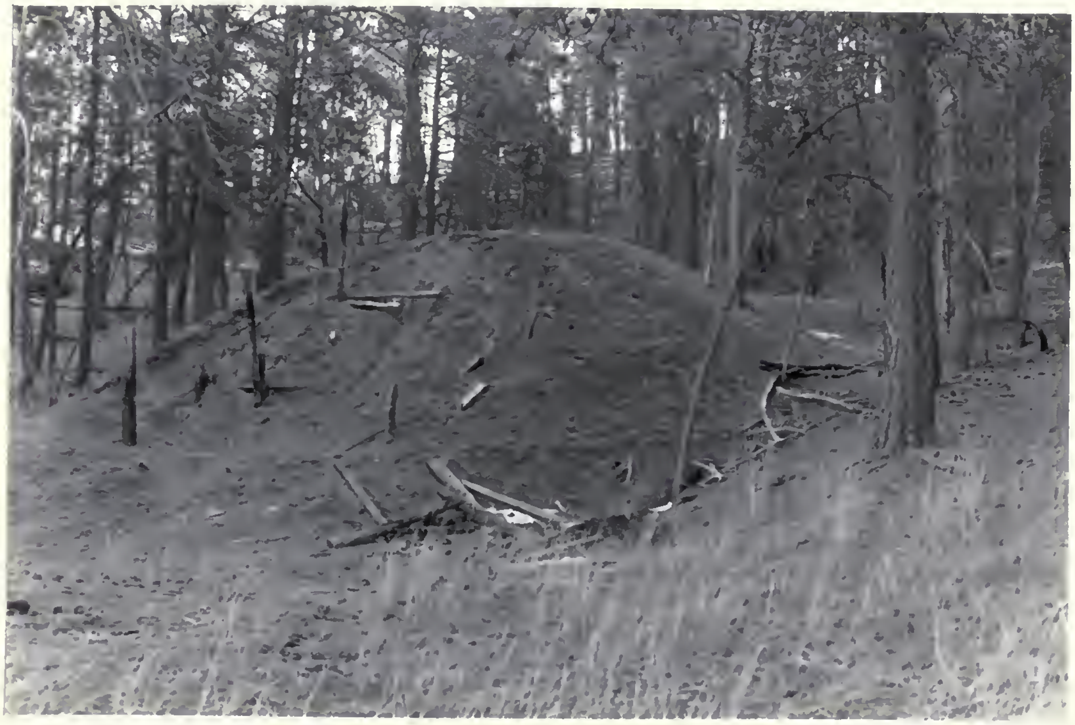
The mines were owned and operated by two brothers, Bill and Littleton (Hall) Cowen. Later Littleton bought Bill's share of the mines which were small wagon mines employing two to three workers at the most (Koza 1987). Originally the mines were opened in 1912 to provide coal for the Great Northern Railroad. However, the branch line that was to run from Lewistown to Winnett, Montana was never completed (Deal and McDonald, ed. 1976).

The mines, at the most, went 1500 feet back into the hillside. Because of faulting conditions and the coal seam pinching out, the entries in the mines were somewhat zig-zagged (GLO 1933-1938). Timbers were used extensively throughout the workings. Vent shafts were used to help circulate air into the mines. On top of the vent shafts a tall wooden box was constructed which acted as a chimney to help draw the air out of the mine. This system worked well as the mines had excellent air circulation. Of the three types of draft animals (i.e, mule, horse and Shetland pony) used to pull the mine carts out of the mine, Mr. Koza (1987), a miner at the Cowen Mines, noted that at the Cowen mines the pony was preferred.

The coal in Section 17 is federally owned and in 1930 William Cowen received prospecting permit Billings 032452 for the SE1/4 NE1/4, N1/2 SE1/4. The prospecting permit was cancelled in 1932. Since the mine in Area 3 (see sketch map) is located in the extreme northeast corner of Section 17 near Sections 8 and 9 the entries extended into these sections. The coal in Section 9 is federally owned and in 1933 Littleton Cowen received federal coal permit Billings 034332. The permit was for coal in the S1/2 SW1/4 Section 9. It was cancelled on April 8, 1936 (GLO 1933-1938).

Lump coal was sold at the mine for $3.50 per ton and $5.00 per ton delivered in Lewistown while slack was sold at the mine for $1.10 per ton and in Lewistown $2.50 per ton (GLO 1933-1938).


ADIT 4
BEDSPRINGS
TIN CAN
STOVE PART
ADIT 3
ADIT 2
AREA 3
TRUCK FRAME
N
COWEN MINE SEC. 17
COAL CART
ADIT 1
AREA 2
1322
1316
1310
ADIT 7
ADIT 6
AREA 1
ADIT 5
OPEN
U.S. HIGHWAY 87
100m.
CONTOUR INTERVAL 6m.



Cowen Mine #2 and #3 (view east).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24FR637

1.2 Site name/field designation: Company Mine

1.3 County: Fergus

1.4 Township/range:

SW 1/4 NW 1/4 NE 1/4
NW 1/4 SW 1/4
T 15 N R 20 E SE 1/4 NE 1/4 NW 1/4 of Section 9

1.5 UTM:

Zone 12 637000 Easting 5215550 Northing

1.6 Site type: coal mine

1.7 Recording status & comments:

mapped, photographed and recorded

1.8 Administrative/surface ownership:

Richard Kock
east of
Lewistown, Montana

1.9 Mineral ownership: Federal

1.10 Project name:
Department of State Lands
Abandoned Mine Reclamation
Program

1.11 General narrative description of site:

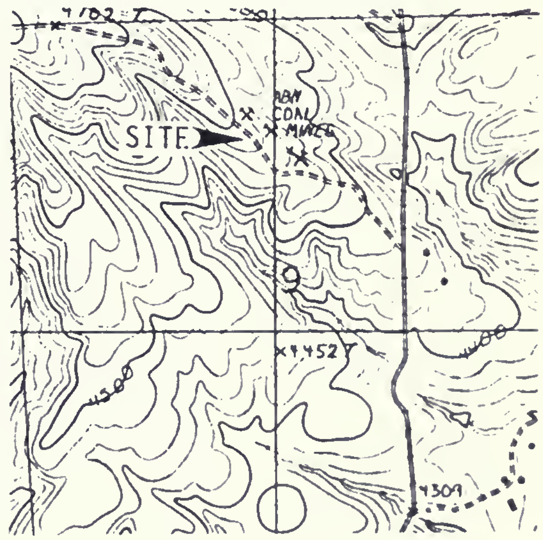
The site consists of four mine adits and associated coal spoil dumps located along the northeast edge of a finger ridge.

1.12 Map reference:
USGS Horsethief Coulee West, Montana Provisional Edition 1985, 7.5 Min. Quad

1.13 City/town: ☒ vicinity of
Lewistown, Montana

1.14 Access to site:

Drive east out of Lewistown on U.S. Highway 87 for 10-3/4 miles. Turn northwest onto a two track trail for 1/4 mile. The trail passes through the site.



D86P.1

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24FR637

2.1 Geographic setting:

2.2 Elevation: 1400 m 4500 ft.

General: The site is in the Judith Mountains. These mountains rise out of the surrounding plains.
Local: The site is on a finger ridge that trends northeasterly off of Flat Mountain. It is about 275 km below the top of the mountain.

2.3 View/aspect:
The view is to the northeast for several kilometers.

2.4 Major drainage:
North Fork McDonald Creek

2.5 Minor drainage(s):
Parr Creek

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	Parr Creek	.4 km	30 m	intermittent
b.				

2.7 Regional vegetation:
Lodgepole PIne - Douglas Fir Forest (Payne 1973)

2.8 Local vegetation:
ponderosa pine, fir, aspen, chokecherry, wildrose, timothy, brome and bluejoint wheatgrass

2.9 Soils:
brown loam

2.10 Surface visibility/season of survey:
fair/winter

2.11 Other environmental factors pertaining to site location:

The site is within the Lewistown coal field.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24FR637

3.1 Condition of site:
The site has been destroyed.

3.2 Site significance (NRHP):
These mines as well as the numerous other mines in the area played an important role in the development of Central Montana and, therefore, meet Criterion A. All that currently exists at the site are the mine adits and coal spoil dumps. Without the tipples and other structures the site has lost its capacity to convey the physical characteristics it possessed in the past. The site is not recommended as potentially eligible for listing on the NRHP.

3.3 Impacts:
The Department of State Lands plans to close the mine openings, remove hazardous structures and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson	3.6 Site recorded by: Gene Munson	3.7 Revisions by:
Date: 12/24/86	Date: 12/24/86	Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:
Calvert, W. R. 1909 Geology of the Lewistown Coal Field, Montana. United States Geological Survey, Bulletin 390.
Munson, Gene 1987 A Cultural Resource Inventory and Evaluation of Selected Coal Mines and a Gold Mine Near Lewistown, Montana. For the Montana Department of State Lands. GCM Services, Inc., Butte.

3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St. Butte, MT 59702

3.12 Photos & accession No:

No.	Description	View
Cowen Section 9	overview Mine 1	NW
Frame 35	overview of area	NW
Frame 36		

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24FR637

5.1 Site dimensions, how determined: The site measures 175 m NW/SE x 120 m NE/SW. This is the area in which the mine adits, coal spoil dumps, tipple remains, and ground subsidence depressions are located.

21,000 m2

5.2 Features:
The features include four mine adits with associated coal spoil dumps, numerous ground subsidence depressions and remains of two tipples. The remains of the two tipples are associated with mine adits 1 and 3 (see map). All that is left are a few upright posts, boards and planks. The subsidence depressions vary from being quite small (1 m - 2 m across) to being fairly large (over 10 m across). The small ones generally are steep sided (sinkhole-like), whereas, the larger ones generally are not steep sided.

5.3 Artifacts (observed, collected):
Artifacts consist of a few scattered boards and pieces of 1 x 2 steel rail used for mine car track.

5.4 Historical information and evaluation:
On November 16, 1903 a coal entry patent (Patent No. 2042) for the SW1/4 NE/14 of Section 9 was issued to William H. Pratt (Bureau of Land Management records). It is probable that Pratt did some coal mining at the mines currently located in that part of Section 9. In 1907, the mining activity in the NW1/4 NE1/4 Section 9 was being carried out by Shipley and Kemp who had a contract to supply coal to the Gold Reef Mining and Milling Company. The Gold Reef Mining and Milling Company were at that time operating the gold and silver mine and cyanide plant about a mile northwest of Giltedge (Calvert 1909). The mine was called the "Company" after the Gold Reef Mining and Milling Company (see also site number 24FR638 Gilt Edge). In 1907 a slope had been driven 400 ft. Since the formation dipped at 17° down from the adit a winch was used to haul the mine cars out of the mine. The coal bed was 36 inches thick with a 1 inch clay parting at 8 inches above the bottom of the bed (Calvert 1909). During the 1920s Lewis Scarborough operated one of the mines at the site (Tuss 1987). Since the coal in Section 9 is owned by the federal government the government records were searched for information. Unfortunately, the files for Section 9 have been destroyed (Porenta 1987).

5.5 References: (See Section 3.9)

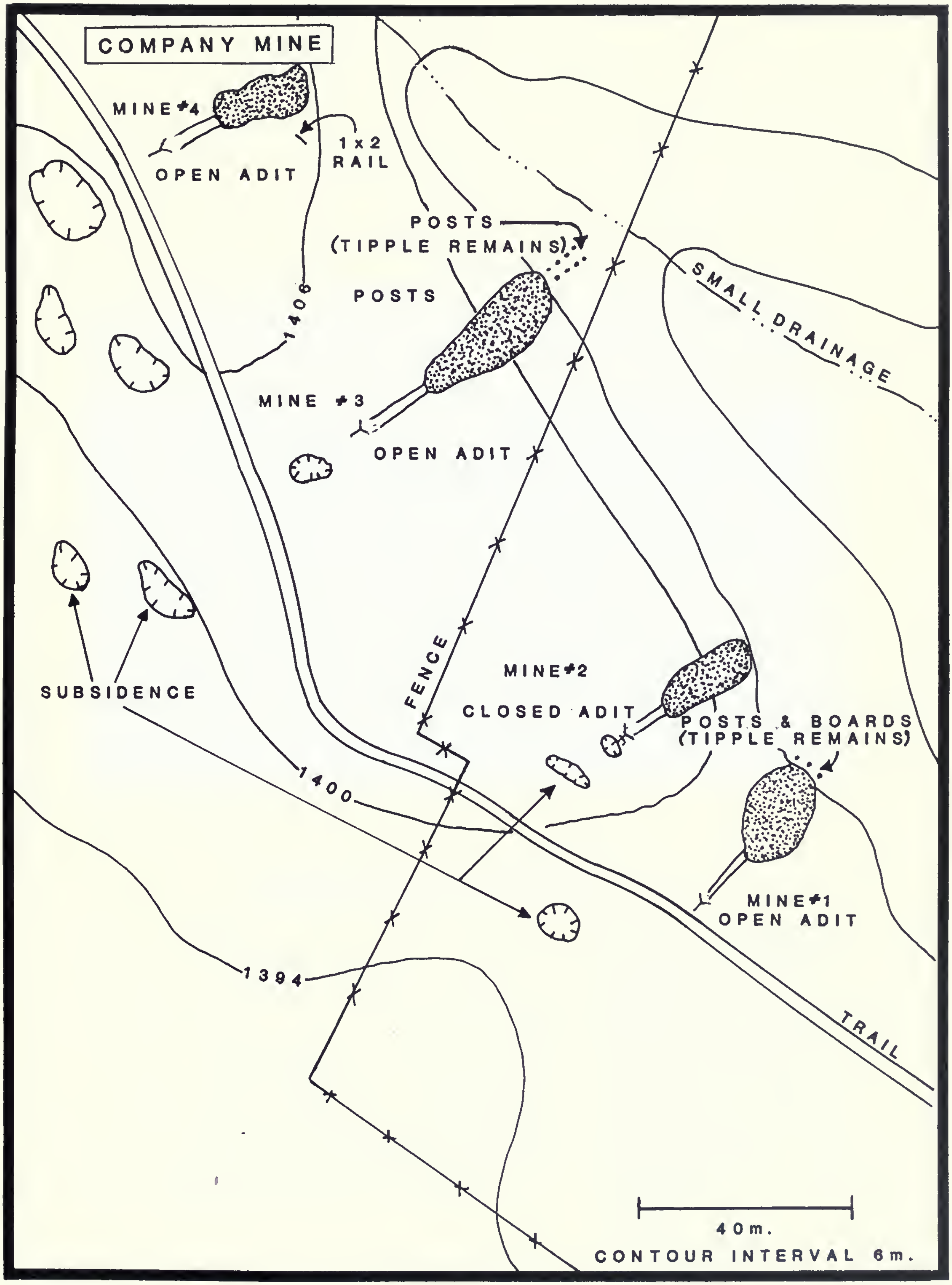
Bureau of Land Management Records n.d. Government Land Office Records, Patent entries, located at the Bureau of Land Management, Billings.

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

Porenta, Saundra L. 1987 Personal communication, January 14, 1987, Bureau of Land Management, Chief, Branch of Records, Billings.

Tuss, Anthony 1986 Personal communication, December 29. East of Lewistown, Montana.

5.6 Subsurface testing, results, methods, etc.
None


COMPANY MINE
MINE #4
OPEN ADIT
1 x 2
RAIL
POSTS
(TIPPLE REMAINS)
POSTS
1406
SMALL DRAINAGE
MINE #3
OPEN ADIT
SUBSIDENCE
FENCE
MINE #2
CLOSED ADIT
POSTS & BOARDS
(TIPPLE REMAINS)
1400
MINE #1
OPEN ADIT
1394
TRAIL
40m.
CONTOUR INTERVAL 6m.

Company mine (view northwest).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24FR638	1.2 Site name/field designation: Gilt Edge	1.3 County: Fergus

1.4 Township/range:

T 16N R 20E

SE 1/4 of Section 20
SW 1/4 SW 1/4 of Section 21
NW 1/4 NW 1/4 of Section 28
SW 1/4 SW 1/4 of Section 17
SE 1/4 SE 1/4 of Section 18

1.5 UTM:

Zone 12

	Easting	Northing
Mill #2 and mine:	634550	5222550
Mill #1:	636000	5220900
Town:	636300	5220700

1.6 Site type:
gold mine, mills and town

1.7 Recording status & comments:

mapped, photographed and recorded

1.8 Administrative/surface ownership:

private

1.9 Mineral ownership:

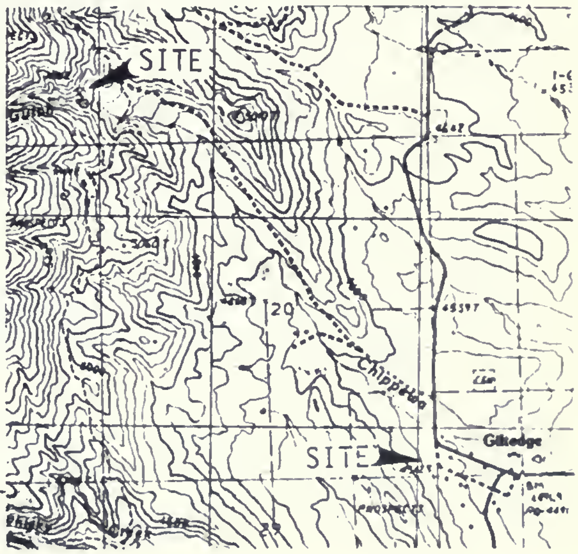
1.10 Project name:
Department of State Lands Abandoned Mine Reclamation Program

1.11 General narrative description of site:
The site consists of the remains of a gold mine, mills for processing the ore, tailings and the town of Gilt Edge located in the Judith Mountains of central Montana.

1.12 Map reference:
USGS Judith Peak, Mont. 15 Min quad, 1941 edition

1.13 City/town: ☒ vicinity of
Lewistown, Montana

1.14 Access to site:
Drive east out of Lewistown on U.S Highway 87 for 11 miles. Turn north onto a county road. Follow the road for 6 miles to the town of Gilt Edge. The site begins here and continues up Chippewa Creek for about 1/2 mile.



D86P.2

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number: 24FR638

2.1 Geographic setting:

2.2 Elevation: 1370 m 4500 ft.
1463 4800

General: The site is in the Judith Mountains. These mountains rise abruptly out of the surrounding plains.
Local: The east end of the site (i.e., the town of Gilt Edge) is at the base of the Judith Mountains. The mine which is on the west end of the site is on the face of a mountain. In between the town and the mine in the ravine drained by Chippewa Creekare are the mills, tailings and other mining remains.

2.3 View/aspect:
The view is for several kilometers to the east.

2.4 Major drainage:

Chippewa Creek

2.5 Minor drainage(s):

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	Chippewa Creek	creek runs through the site		intermittent
b.				

2.7 Regional vegetation:
Lodgepole pine - Douglas fir forest (Payne 1973)

2.8 Local vegetation:
ponderosa pine, lodgepole pine, fir, aspen, chokecherry, rose, and bluejoint wheatgrass

2.9 Soils:
brown loam

2.10 Surface visibility/season of survey:

fair/winter

2.11 Other environmental factors pertaining to site location:
The site is located in tdhe Judith Mountains which are known for their rich mineral deposits.

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24FR638

3.1 Condition of site:
The majority of the site has been destroyed. Little remains of the town or mining related features.

3.2 Site significance (NRHP):
The mine, the mills and the town exemplify a period of history in the development of Montana at the end of the 19th century and the beginning of the 20th century when mining was a dominant industry. As part of this major economic theme the site meets Criterion A. However, the site lacks the presence of physical characteristics needed to convey the feeling of these historic qualities. For example, none of the buildings in the business district are still standing. Neither are the schools, hospital or church. So little remains of the mine, mills and town that the site has lost its integrity and is not considered as potentially eligible for listing on the NRHP. However, the site may be considered as a contributing element to the larger Judith Mountain Historic District. The Judith Mountain Historic District is listed in the 1975 Montana Historic Preservation Plan (Montana Fish and Game Commission 1975). A site form for the District was filled out in 1968. However, it has not been evaluated and nominated (Stanfill 1987).

3.3 Impacts:
The Department of State Lands plans to close the mine openings, remove hazardous structures and either reclaim or remove the mine tailings.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson Date: 12/22/86	3.6 Site recorded by: Gene Munson Date: 12/22 & 23/86	3.7 Revisions by: Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:
Munson, Gene 1987 A cultural resource inventory and evaluation of selected coal mines and a gold mine near Lewistown, Montana. For the Montana Department of State Lands. GCM Services, Inc., Butte. (see attached)

3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St., Butte, MT 59702

3.12 Photos & accession No:

No.	Description	View
Frame 7	tailings at mill #1	SE
Frame 8	tailings at mill #1	E
Frame 9	leaching box	S
Frame 10	tipple	SE
Frame 11	cyanide tank #1	NE
Frame 12	roasting over	E
Frame 13	filters in tank #1	down
Frame 14	base of tank #2	E
Frame 15	cyanide tanks	SW
Frame 16	cyanide tanks	SW
Frame 17	site of mill #1	SW
Frame 18	site of mill #1	SE

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24FR638

5.1 Site dimensions, how determined:
The site measures 3 km NW/SE x .5 km NE/SW. This is the area in which the town of Gilt Edge, the mills, the tailings and the mine are located.

1.5 km^2

5.2 Features:

See attached.

5.3 Artifacts (observed, collected):
In the town of Gilt Edge historic artifacts consist of the remains of an air compressor and wagon parts. At the site of Mill #1 there are numerous scattered boards, the remains of a hoist, a 1.2 m x 3 m tank with baffles in it, gears, and pieces of cable. At Mill #2 there are numerous pieces of timbers, pieces of rail for mine cars, and the remains of a hoisting mechanism.

5.4 Historical information and evaluation:

See attached.

5.5 References

(See Section 3.9)

Stanfill, Alan
1987 Personal communication, Janauary 27, State Historical Preservation Office, Helena.

5.6 Subsurface testing, results, methods, etc.

None

3.9 Publications concerning site: (continued)

Byerly, Ken and Scottie Byerly
n.d. Central Montana's Communities...yesterday, today and tomorrow. Published by Central Montana Publishing Co., Lewistown.

Calvert, William R.
1909 Geology of the Lewistown Coal Field, Mont. United States Geological Survey Bulletin 390.

Deal, Babbie and Loretta McDonald (editor)
1976 History of Giltedge (no author given). In The Heritage book of the Original Fergus County Area, pp. 538-540.

Freeman, Ottis W.
1916 Gold Mining in the Judith Mountains. Montana: Mining and Science Press, Volume 112, pp. 863-865.

King, E. W.
1901 Value of Low Grade Ores. Fergus County Argus, Pictorial edition, Lewistown, Montana, pp. 7-8.

Montana Fish and Game Commission
1975 Montana Historic Preservation Plan with historic site compendium, Volumes I, II and III, second edition.

News Argus
1901 Pictorial Edition, Lewistown, Montana. Printed by the Fergus County Argus, Lewistown.

Payne, Gene F.
1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

Robertson, Almon F.
1950 Mines and Mineral Deposits (except fossil fuels) Fergus County, Mont. United States Department of Interior, Bureau of Mines. Information Circular 7544.

Stanfill, Alan
1987 Personal communication, February 3, Helena, Montana.

Walsh, William and William Oren
1910 Report of Inspectors of Mines of the State of Montana for 1909-1910.

Weed, W.H. and L.V. Pirsson
1898 Geology and Mineral Resources of the Judith Mountains of Montana. United States Geological Survey, 18th Annual Report, Part 3, pp. 437-616, 18 plates and 25 figures.

The following description is of features located 1) at the town of Gilt Edge, and 2) at the mine related facilities. Within the town of Gilt Edge there are 22 historic structures (or remains thereof). Information on the buildings in the town was from county assessor cards located in the Fergus County Courthouse, Lewistown, and by field inspection. The buildings date from 1890 to 1915, however, the majority of the buildings that made up the town have been destroyed or moved since the town was abandoned in 1915-1916. Features 23-30 are associated with the mine and mills.

Feature 1: is a single story brick house with a flat topped hip roof. The layout of the building is square. The foundation is squared rubble, coursed and bedded in mortar. The windows are double-hung sash with 2/2 and 1/1 lights. The building is in good condition.

Feature 2: is a small gable roof wood frame outbuilding in fair condition. The layout of the building is rectangular. It is adjacent to Feature 1.

Feature 3: is a small wood frame outbuilding with a shed roof. The layout of the building is rectangular. It is adjacent to Feature 1. It is in fair condition.

Feature 4: Features 4, 5 and 6 are buildings grouped together. Feature 4 is a small outbuilding made of logs. It has a gable roof. The layout of the building is square. It is in fair condition.

Feature 5: is a small wood frame outbuilding in fair condition. It has a shed roof. The layout of the building is rectangular.

Feature 6: is a single story wood frame house in fair condition. The main part of the building has a gable roof on the south side. There is an addition with a shed roof. The original layout of the building was rectangular, however, the addition makes the building fairly square. The house has brown simulated brick mineralized rolled siding. The windows are double-hung sash with 1/1 lights.

Feature 7: is a single story log house with a gable roof. On the east end of the building is a wood frame addition with a shed roof. The layout of the building is rectangular. The windows are double-hung sash with 1/1 lights. The logs are saddle-notched. It is in fair condition.

Feature 8: is a single story wood frame house in fair condition. The layout is irregular. The main part of the building has a gable roof. An addition on the southeast corner of the building has a shed roof. Mineralzied rolled roofing is used as siding. Some of the windows are double-hung sash with 1/1 lights and others are double lights placed side by side in a frame.

Feature 9: is a small outbuilding made of squared rubble, coursed and bedded in mortar. It has a shed roof. The layout is square. It is deteriorated.

Feature 10: is a single story frame building in a state of ruin. The roof has collapsed. The layout is irregular. It has clapboard siding. The windows are double-hung sash with 1/1 and 2/2 lights. The front porch is three-bay.

Feature 11: Only remnants remain of the building. Apparently it was a house built of frame construction with a gable roof.

Feature 12: All that remains of this building is part of the south wall. The wall is squared rubble, uncoursed and bedded in mortar. This building once was the Washburn clothing store and the Phillips drugstore (Byerly and Byerly n.d.).

Feature 13: is a single story frame house. The main part of the building has a gable roof with the addition having a shed roof. The layout of the structure is irregular. The front porch is two bay and has a hip roof. The siding is clapboard. The windows are double-hung sash with 1/1 lights. It is in deteriorated condition.

Feature 14: is a single story frame house with a gable roof. The siding is vertical boards and battens. The layout of the structure is rectangular. The windows are single light and are apparently non-opening. It is in deteriorated condition.

Feature 15: is a single story house with a hip roof. The layout of the structure is rectangular. The windows are double-hung sash with 1/1 lights. The exterior finish is stucco. It is in good condition.

Feature 16: is a small rectangular shaped frame structure with a shed roof. At one time it had clapboard siding but most of the siding is missing. It served as the jail for the town of Gilt Edge.

Feature 17: is a frame house. The building is in the process of being added onto and has been extensively remodeled. The original structures dates to 1905. However, little of this original structure remains. It is essentially a modern building.

Feature 18: is a rectangular single story log barn with a gable roof. The logs are saddle-notched. It is in fair condition.

Feature 19: is a small rectangular frame building with a gable roof. The siding is vertical boards and battens. It has double doors on the east end. It is somewhat deteriorated.

Feature 20: is a L-shaped house with a gable roof. The siding is clapboard painted white. The windows are double-hung sash with either 2/2 lights or 1/1 lights. Recently, a lean-to made of plywood has been added on the house. The house is in good condition.

Feature 21: is a T-shaped house with a gable roof. The siding is clapboard painted white. The windows are double-hung sash with 1/1 lights. It has a three bay front porch. The porch has a shed roof. It is in good condition.

Feature 22: is a rectangular shaped barn made of logs. The logs are V-notched. It has a gable roof. The building is in fair condition.

Feature 23: is the location of the first mill and cyanide plant used to process the ore from the Gilt Edge Mine. It is located on the west side of the town of Gilt Edge. The original mill which was built in 1892 had the capabilities to treat 50 tons per day. In 1893 the mill was redesigned and the capacity increased to handle 100 tons of ore a day (King 1901) making it the first of its kind in the United States capable of treating 100 tons of ore a day. Gold recovery in the mill was unsatisfactory and it was shut down in 1897 (Robertson 1950). The cyanide treating tanks and part of a tipple is all that remains.

Feature 24: is the tailings dump adjacent to the first mill (Feature 23). The tailings cover an area of about 100 m x 100 m. There are two piles of tailings. The largest pile covers an area about 80 m NE/SW x 30 m NW/SE. The other pile is about 20 m N/S x 10 m E/W in size. They are about 4 m high. In 1918, 8200 tons of the tailings were re-treated in a cyanide plant specially constructed for this purpose (Robertson 1950).

Feature 25: is the location of the second mill and cyanide plant constructed in 1899. It is adjacent to the Gilt Edge mine adit. This facility was much more efficient in recovering gold than the first mill (Feature 23). In 1902 this mill was enlarged and roasting equipment installed. The mill and cyanide plant operated until 1912 (Robertson 1950). All that is left are the foundations of the mill and roasting ovens. The following description of this second mill is by mine superintendent, E. W. King.

> As the extraction of gold from the ore by the use of cyanide solution is comparatively new, a description of the process may be of interest to the reader, and we will take as an example the methods used in the mill of the Great Northern Mining and Development Co. at Gilt Edge.
>
> With a view to save in the cost of the transportation of the ore from the mines to the mill, the mill was built close to the mines, and a haulage tunnel nearly 2,000 feet long was driven under the ore bodies, so that as the ores are mined they can be dropped into chutes along the line of the tunnel. From these they are hauled to the mill in two-ton cars coupled in a train and hauled by a horse, so that the cost of transporting the ore from the mine to the mill does not exceed five cents per ton.
>
> The ore, as it comes from the mine, is dumped into a large bin, holding about 600 tons, and from there it is fed onto a conveyor belt which conveys it to a No. 5 Gates ore breaker. From this it is elevated and

falls on a grizzly, and everything finer than three-fourth-inch mesh is delivered by gravity to a one-fourth-inch mesh screen. The rejection from this screen is spouted to the fine rolls, and all that has passed over the coarse grizzly is spouted to the coarse rolls. After passing through the rolls the ore is again passed through the screens so that all of the finished product is reduced to one-fourth-inch mesh or finer. From the screens it is elevated to the fine ore bins above the tanks, and from there it is conveyed to the leaching tanks in a two-ton automatic dumping car driven by an endless cable.

There are six leaching tanks, each 28 feet in diameter and 3 feet high. As soon as one of these is filled with ore, a strong solution, consisting of eight pounds of cyanide to each ton of water, is flowed onto the ore through the bottom of the tank until the ore is entirely covered. It is allowed to remain this way for about eight hours, when it is drawn off and a weaker solution is flowed on from the top of the ore and allowed to leach through it for about forty-four hours, and then the ore is thoroughly washed with two wash waters and pumped as dry as possible with a vacuum pump and then emptied out of the tank, and the tank is ready to be filled again.

After the solutions have passed through the ore they are passed through a filter tank that removes all of the fine sediment that may be held in suspension, and they are then passed through the zinc boxes where the gold is deposited in a semi-metallic state on the zinc shavings in the boxes. The zinc product is removed from the boxes about every ten days and cut down with dilute sulphuric acid, and then washed in five or six washes of clear water to remove the zinc sulphate and other impurities. It is then filtered, roasted and smelted down into gold bricks weighing about ten pounds each (King 1901:8).

Feature 26: is the main haulage adit for the Gilt Edge mine. It is open. There are about 2-1/2 miles of underground workings at the mines (Robertson 1950).

Feature 27: This is the tailings produced by the second mill (Feature 3). The tailings are not in a pile(s). Instead, they blanket the Chippewa Creek valley floor for over 1 km.

Feature 28: This feature is a single story wood frame building covered with corrugated galvanized sheet steel. It has a gable roof. The outlay of the building is rectangular. It is adjacent to the mine adit. A photograph of the mine taken in 1901 shows a similar building at the location of Feature 6 (Fergus County Argus 1901:9). It is assumed that Feature 6 is the building shown in the photograph. It is in fair condition.

Feature 29: is a single story wood frame building covered with corrugated galvanized sheet steel. This small rectangular building has a shed roof. The building is located near the mine adit. A building of similar shape and size is shown in a 1901 photograph (Fergus County Argus 1901:9). It is assumed that Feature 7 is the building shown in the photograph.

Feature 30: This feature is a fairly small building (7 m north/south x 8 m east/west) located .6 km down the creek from the mine. All that remains are parts of the walls. The walls are made of squared rubble, coursed and bedded in mortar. A photo taken in 1901 shows the building (Fergus County Argus 1901:9). It is not known what the function of the building was.

Feature 31: is an outside privy of frame construction with a shed roof.

5.4 Historical information and evaluation: (continued)

In 1884-1885 Wilson, Anderson and Munson staked mining claims in the area which would become known as the Gilt Edge mining area. They sold the claims to Collins and Armington who, in 1892, constructed a small, primative cyanide mill to process the low grade ore. This mill was on the west edge of the town of Gilt Edge and about two km from the mine. The Ammon-Strivers Mining Company bought the property in 1893. They employed Professor W. B. Potter of St. Louis, Missouri, as a consulting engineer. He had the mill rebuilt but even though this rebuilt mill was an improvement over the original one it still was not very efficient. However, it was the first cyanide mill in the United States capable of handling 100 tons of ore a day (Robertson 1950). In the summer of 1896 the property was attached by lien holders (Weed and Pirsson 1898).

The Great Northern Mining and Development Company purchased the property in 1897. They hired E. W. King as their mining superintendent and under his direction the mine became profitable. Part of this was due to the construction in 1899 of a new, modern mill adjacent to the main mine adit. This location near the mine greatly reduced the cost of hauling the ore. The Gold Reef Mining Company bought the property in 1902. The mill originally had the capacity to handle 150 tons of ore a day. The Gold Reef Mining Company increased the mill's capacity to 350 tons of ore per day (Walsh and Oren 1910). Coal was used to fire the ovens for roasting the ore. The Gold Reef Mining Company got the coal from a mine six km to the south. The mine was named the "Company" after the Gold Reef Mining Company (Calvert 1909). Some of the ore could not be treated directly by the cyanide process and had to be roasted first. This ore was called "black" or "unoxidized" ore, whereas, the ore that did not need to be treated was called oxidized ore.

In 1909 J. H. Drake became the owner of the property. He leased it to the Gilt Edge Lease Mining Company which was owned by Caldwell Cooper, and Turnbull. Mining ceased in 1912. By this time there were over 2-1/2 miles of underground workings. Surface or strip mining of the mountain side also took place. Walsh and Orem (1910) reported that during the winter, mining activity was underground and during the summer it was on the surface.

From 1901 to 1912 the mine yielded over 65,000 ounces of gold and over 3,000 ounces of silver. The amount of gold recovered from the ore ranged from 70 cents to $12 ton (Robertson 1950).

In 1918, 8,200 tons of the tailings from the first mill were re-treated in a cyanide plant specially constructed for this purpose. This produced 528 ounces of gold and 74 ounces of silver (Robertson 1950).

The property lay idle until 1940 and 1941 when the Newmont Mining Corp. made an examination of the accessible workings and conducted several hundred feet of exploratory work along with some core drilling (Robertson 1950).

The town of Gilt Edge came into existence in 1885 as the result of the discovery of gold at the Gilt Edge Mine. However, nearby Fort Maginnis and the influx of homesteaders into the surrounding area added to its growth. When Fort Maginnis (built in 1880) was abandoned in 1890 several of the buildings were moved to Gilt Edge (Deal and McDonald, ed. 1976).

5.4 Historical information and evaluation: (continued)

In 1899 a plat of the townsite of Gilt Edge was surveyed and filed in the Fergus County Courthouse in Lewistown. Currently, the name of the town is spelled as one word - Giltedge. The lots measured 25 feet x 120 feet. Each full block had 28 lots. There were 43 blocks laid out.

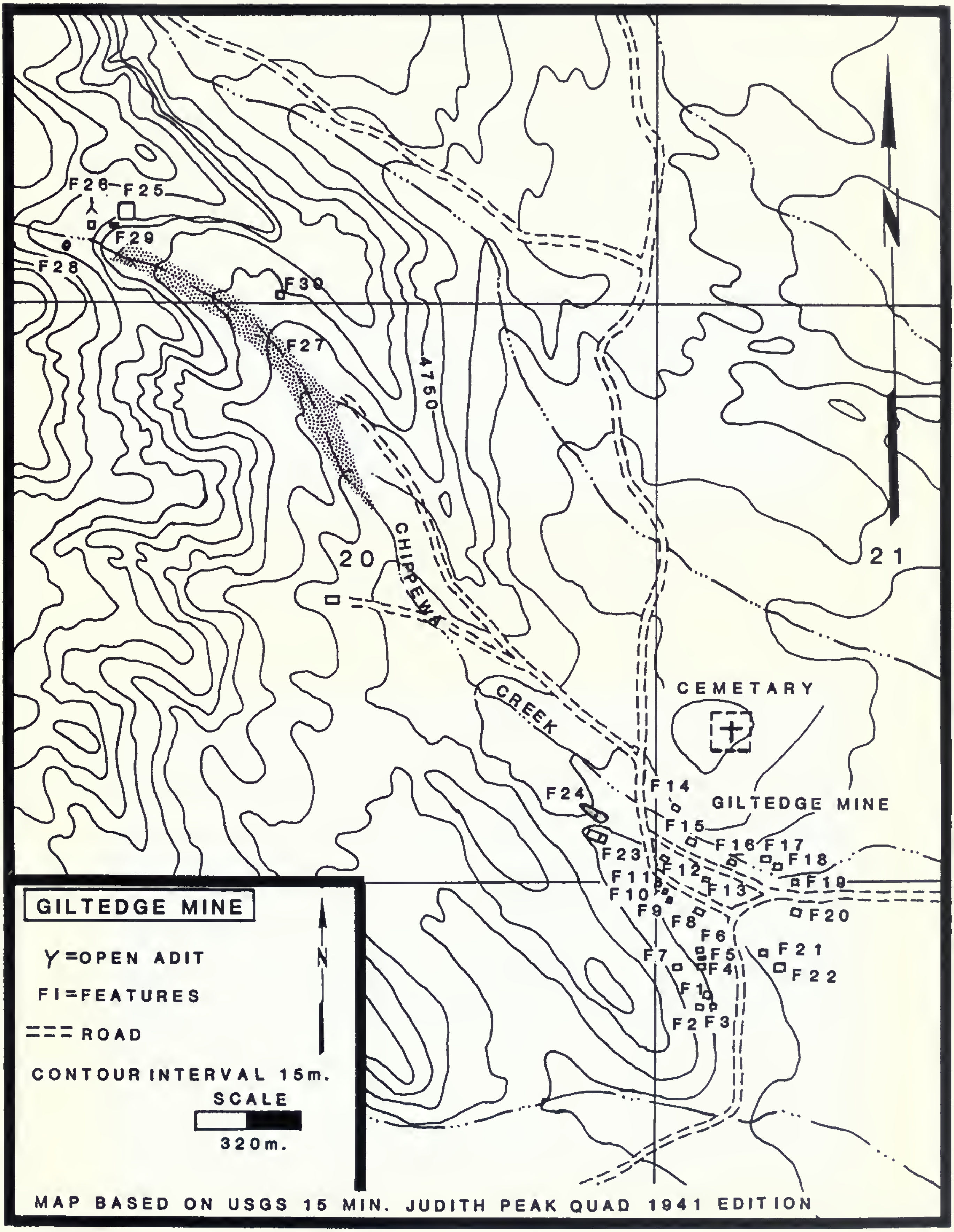
Since the town of Gilt Edge depended almost entirely upon mining for revenue it waxed and waned along with the Gilt Edge mine. In 1901 Gilt Edge had a population of 350 people and was the distribution point for mail to post offices at Fort Maginnis, Roy, Fergus, Alpine, Edgewater, Maiden, Grass Range, Flatwillow, Musselshell, Baldwin, Milner and Junction (News Argus 1901). By 1916, the town was almost entirely deserted (Freeman 1916).

The town was the shopping and medical center for the miners and millmen of the area. It had a hospital and four to five doctors. Traveling dentists would come to town periodically and set up shop for a few days. "There were six general stores (Caraway, Barnes, Mercantile, Garrens, Forster and Millinger), a candy store, two barbershops, bakery, two drugstores, clothing story, funeral parlor, four livery barns, butcher shop, six hotels and boarding house, a restaurant, two blacksmith shops, 13 saloons and one blind pig which had no license so sold whiskey through the back door" (Byerly and Byerly n.d. 46). Part of one building is all that remains of these businesses. The red light district consisted of two blocks of houses with extra girls that came in by stagecoach on pay days (Byerly and Byerly n.d. 46). One of the brothels, which was called the Palace, still stands (Feature 13).

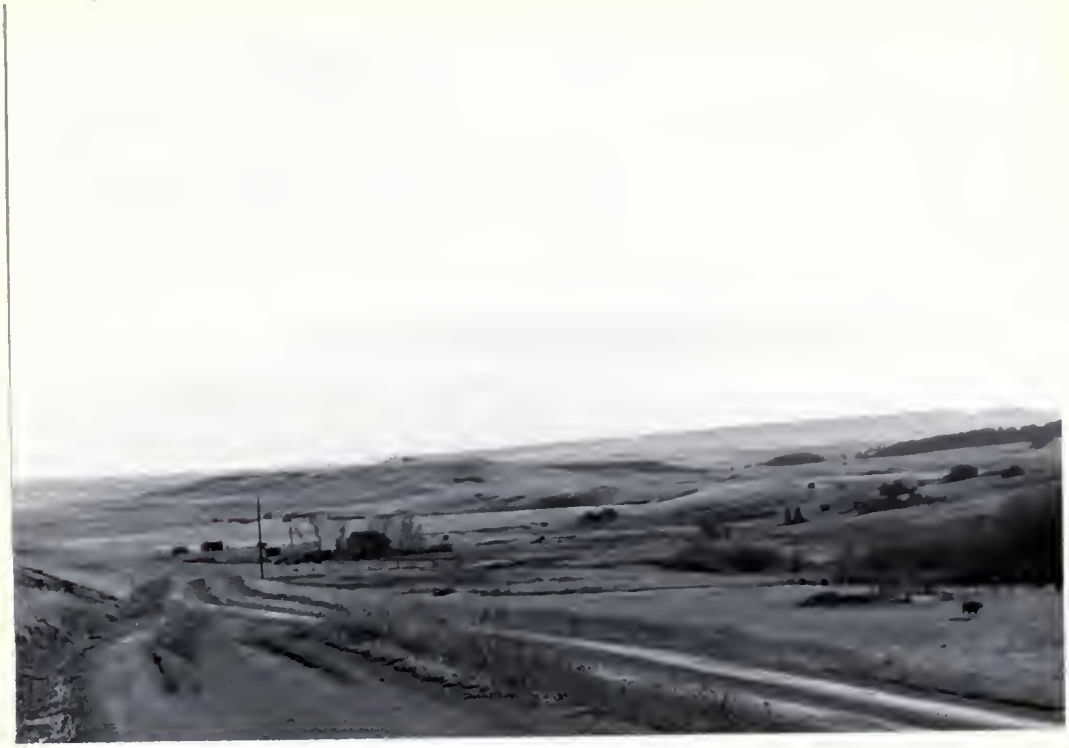
The Gilt Edge cemetary is located on a hill immediately north of town.

3.12 Photos & accession No: (continued) Site No.: 24FR638

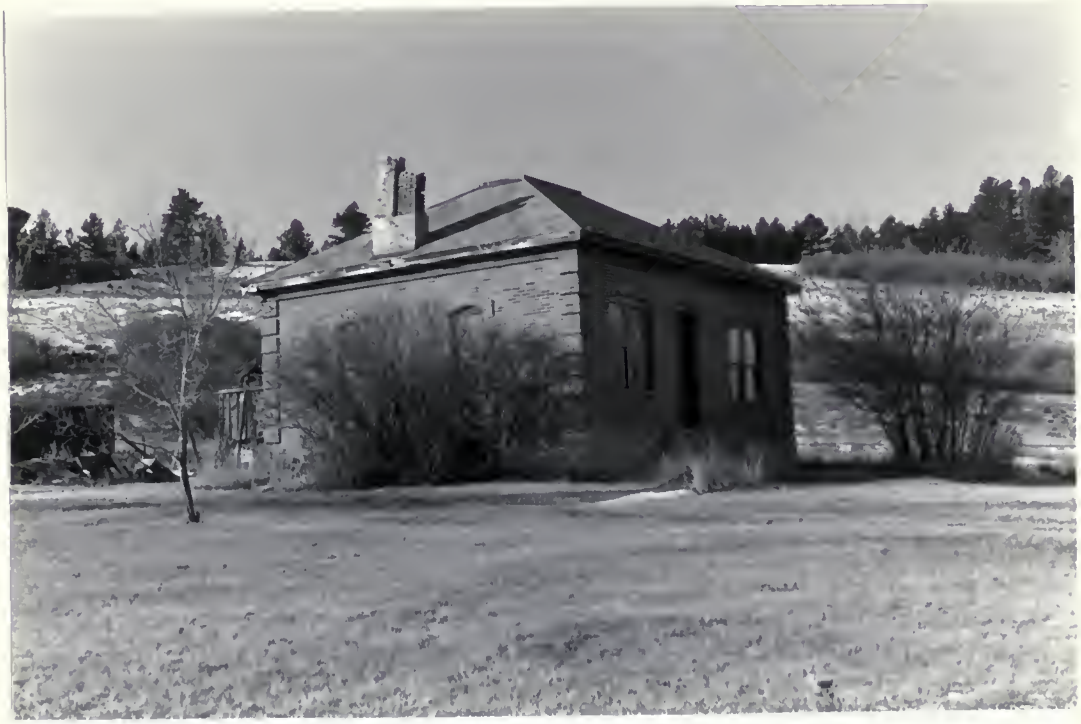
No.	Description	View
Frame 19	Features 1-3	W
Frame 20	Feature 8	SW
Frame 21	Feature 14	N
Frame 22	Feature 10	SW
Frame 23	Feature 10	S
Frame 24	Feature 11	S
Frame 25	Feature 9	S
Frame 26	Feature 12	NE
Frame 27	Feature 14	N
Frame 28	Feature 15	N
Frame 29	Feature 13	SW
Frame 30	Feature 13	SW
Frame 31	Feature 13	SE
Frame 32	Feature 13	SE
Frame 33	Feature 16	E
Frame 34	Feature 16	NW
Frame 35	Feature 19	NW
Frame 36	Feature 20	SW
Frame 37	Feature 21	SW
Frame 38	Feature 21	SE
Frame 39	Feature 22 notching of logs	NE corner
Frame 40	Feature 4-7	W
Frame 41	Feature 1	W
Roll 2		
Frame 33	Feature 30 and 31	NW
Frame 34	Feature 30 and 31	NW
Frame 35	Feature 25	NW
Frame 36	Feature 28 and 29	W
Frame 37	Feature 25	W
Frame 38	Feature 25	SE
Frame 39	Feature 25	N
Frame 40	Feature 25	E
Frame 41	Feature 26	W



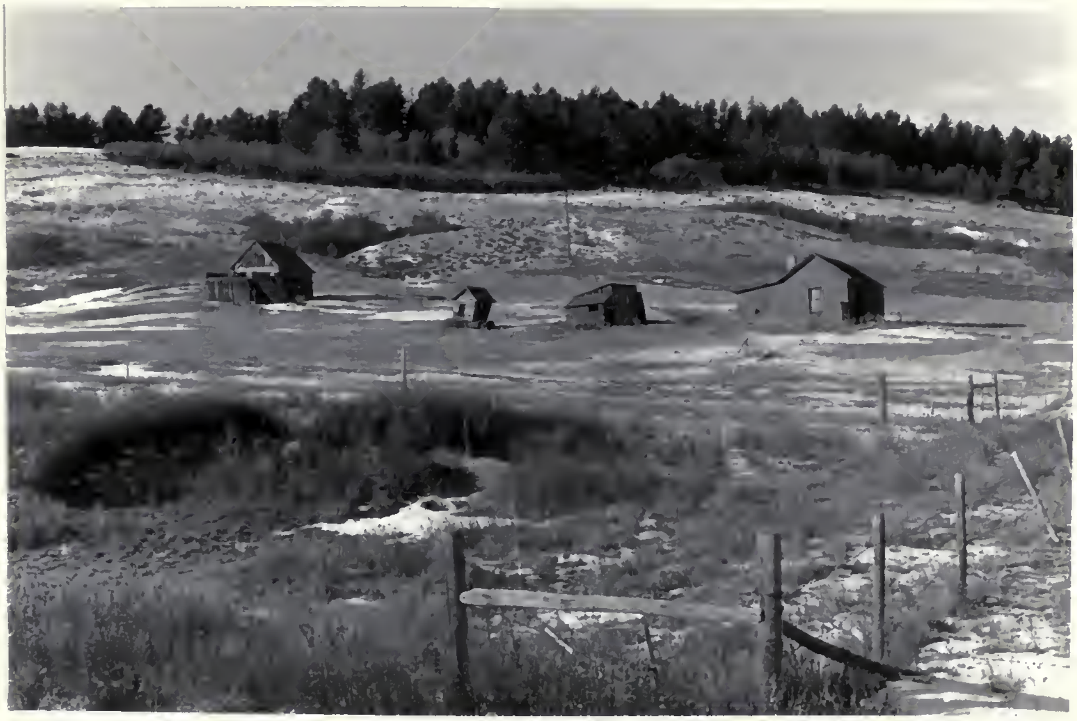
MAP BASED ON USGS 15 MIN. JUDITH PEAK QUAD 1941 EDITION



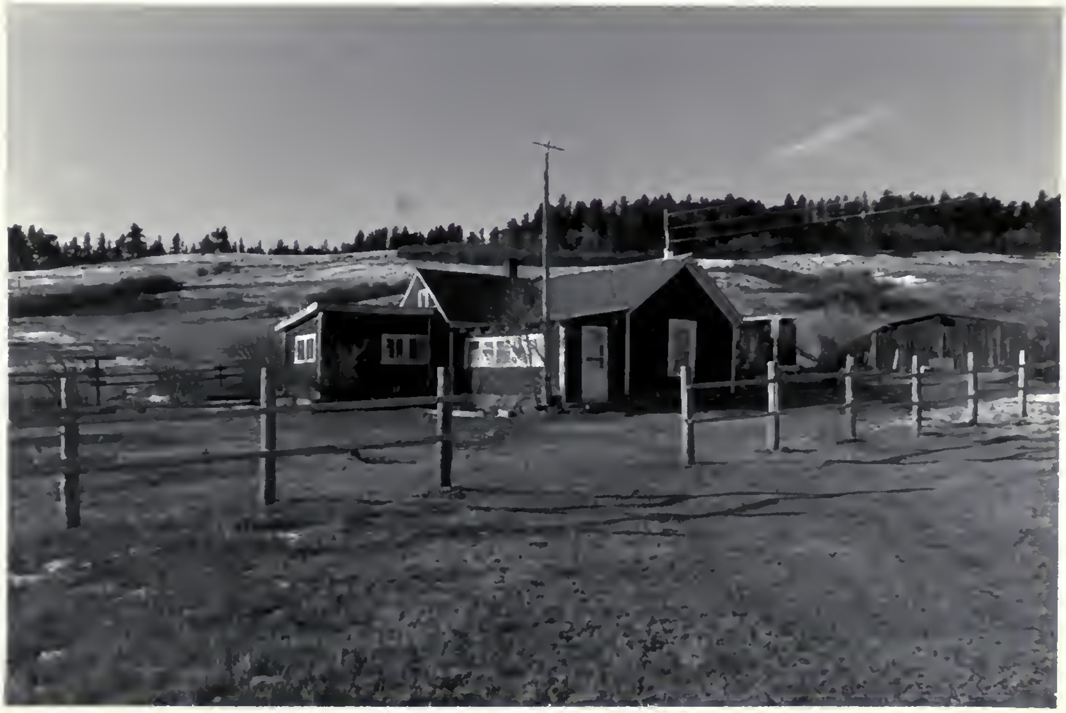
Overview of the town of Gilt Edge (view to southeast).



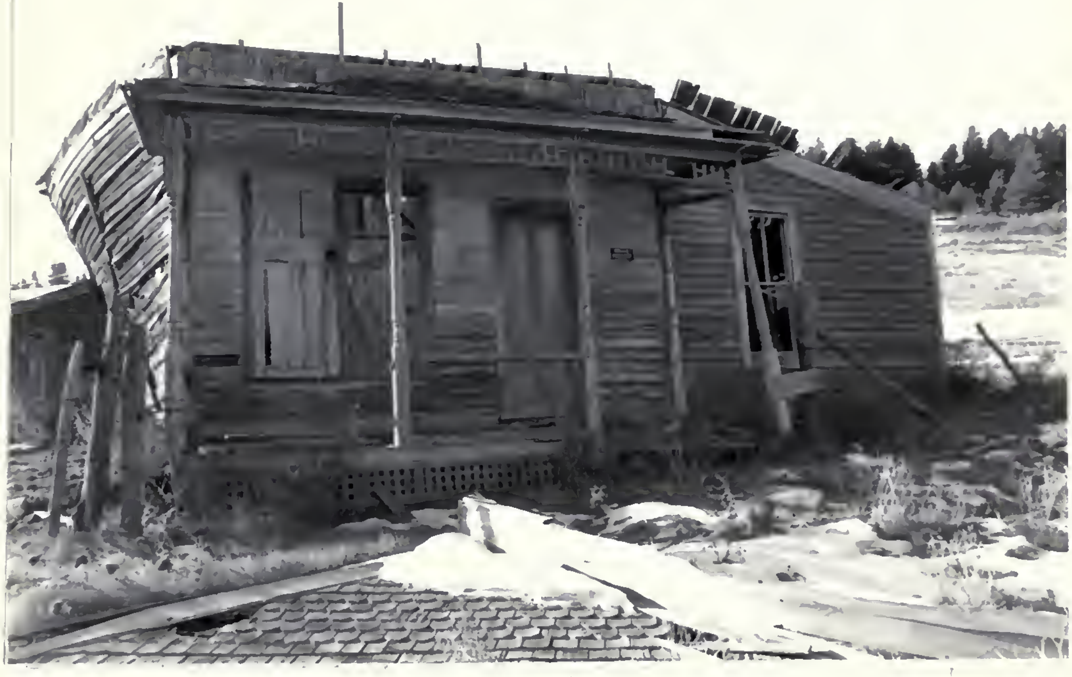
Feature 1 (view west).



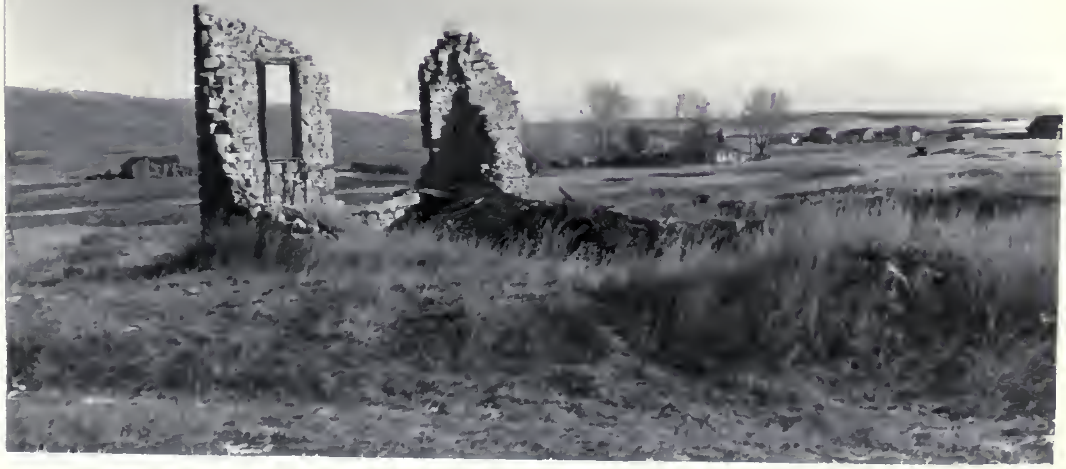
Features 4-7 (view west).



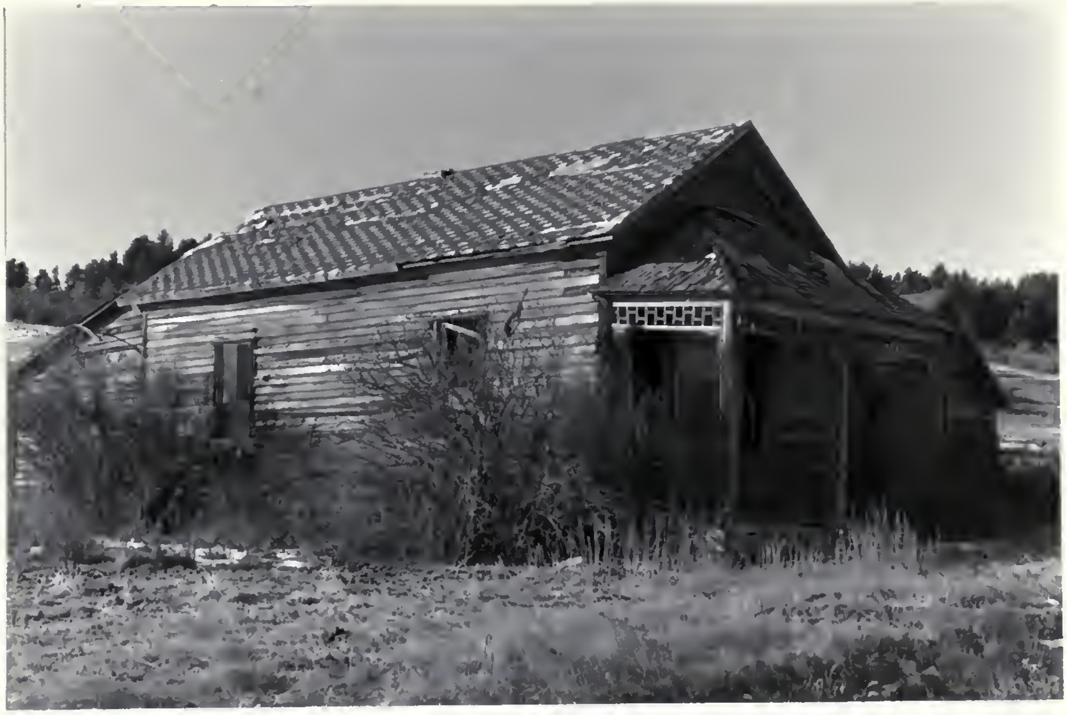
Feature 8 (view southwest).



Feature 10 (view southwest).

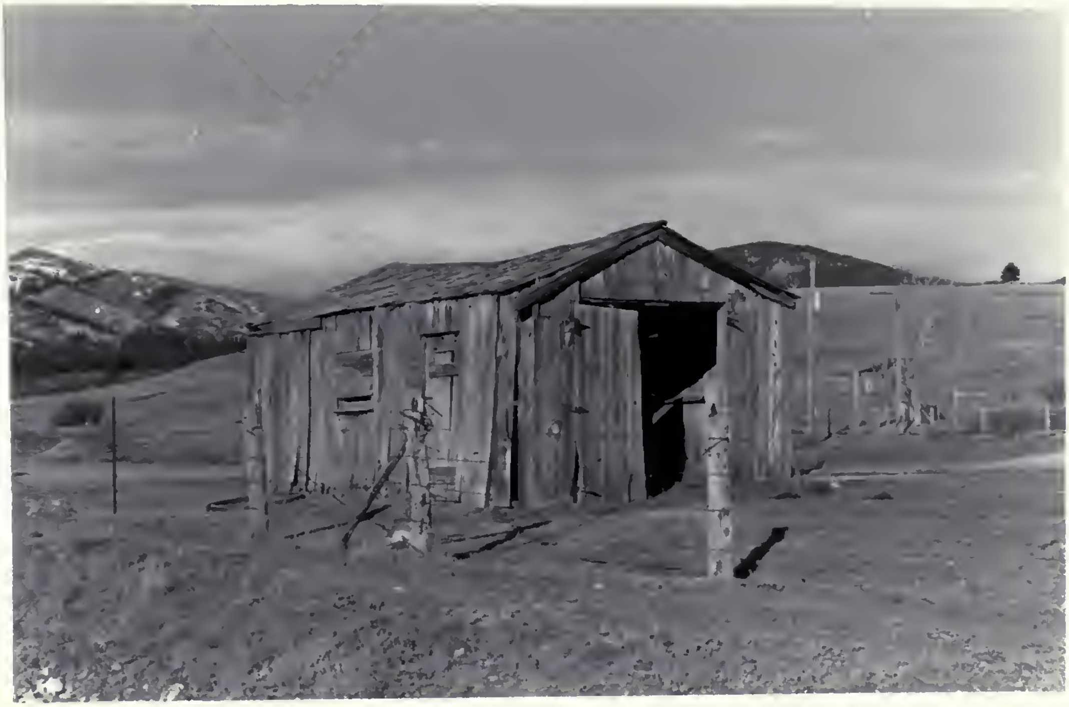


Feature 12 (view northeast).

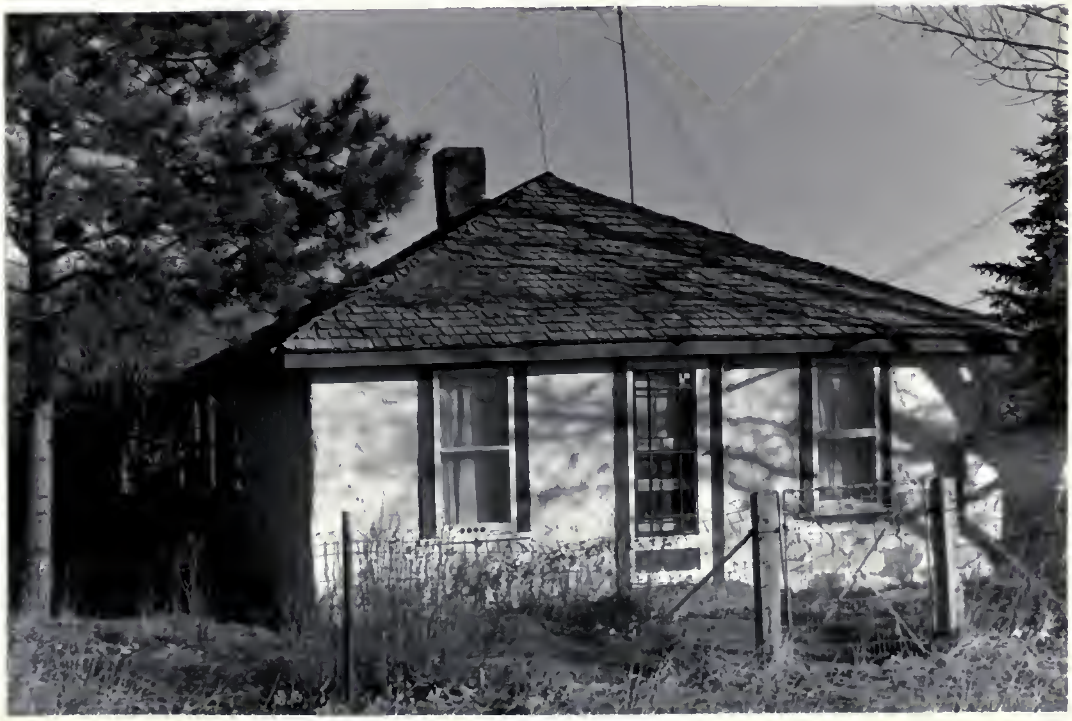


Feature 13 (view southwest).

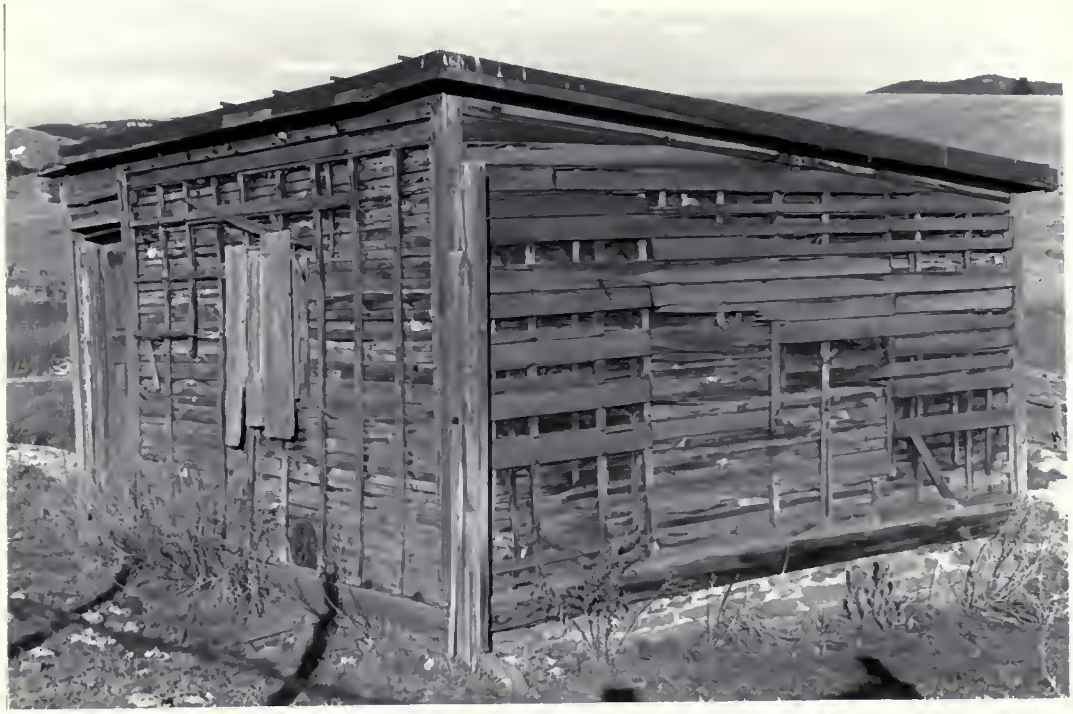
Feature 14 (view north).



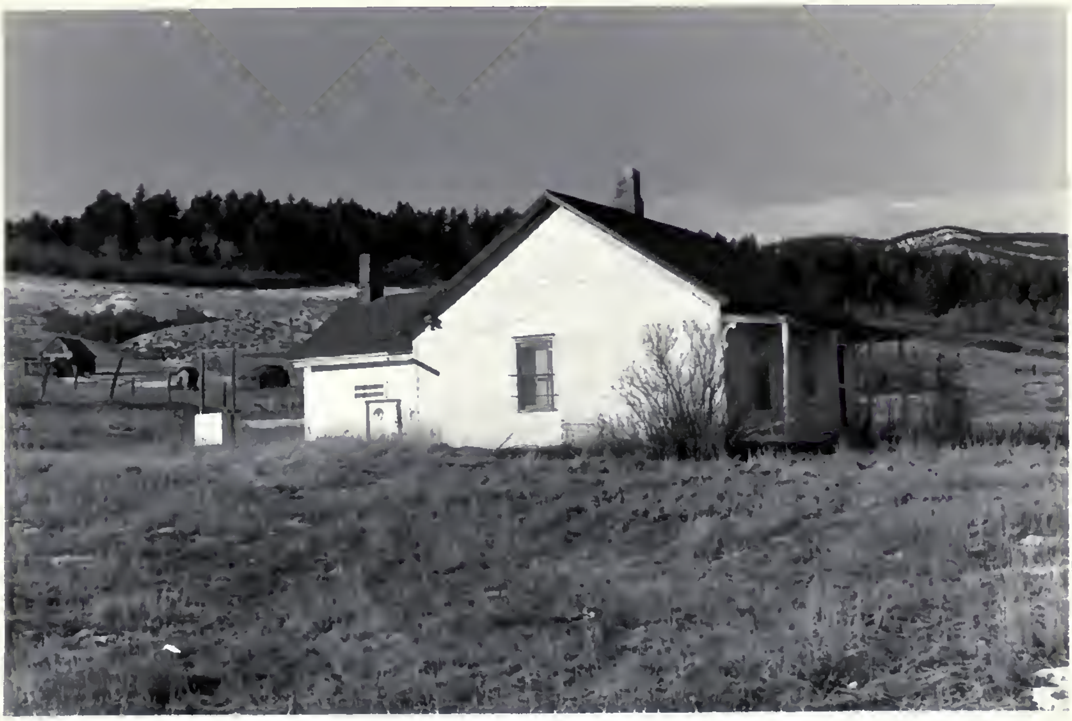
Feature 19 (view northwest).



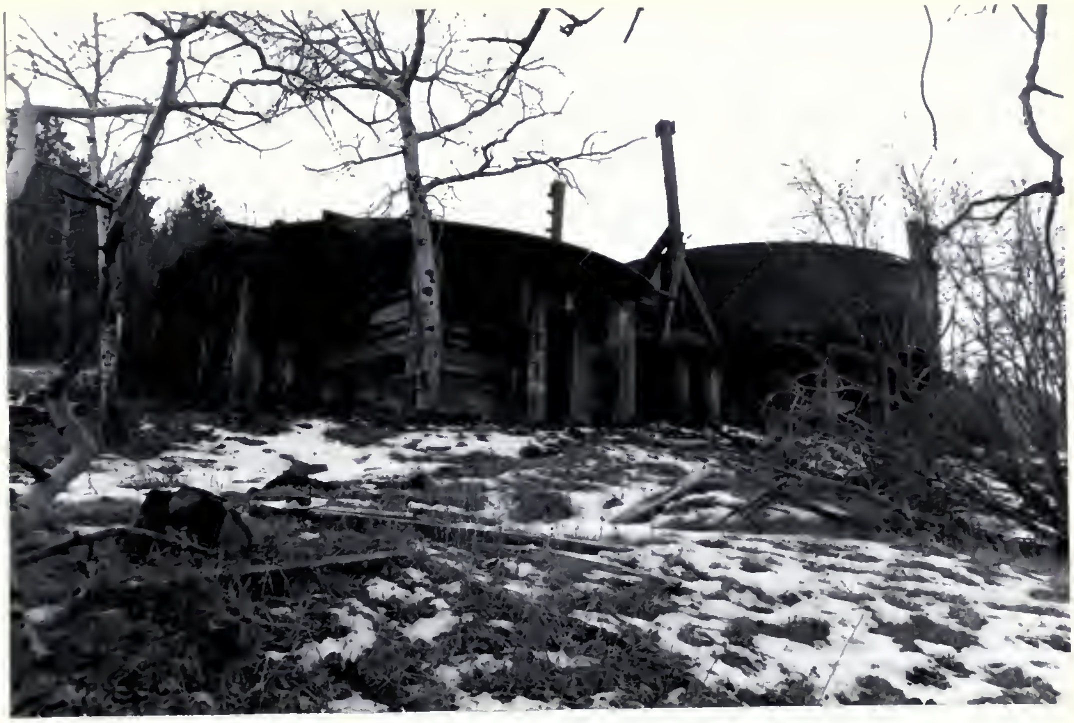
Feature 15 (view north).



Feature 16 (view northwest).



Feature 21 (view southeast).

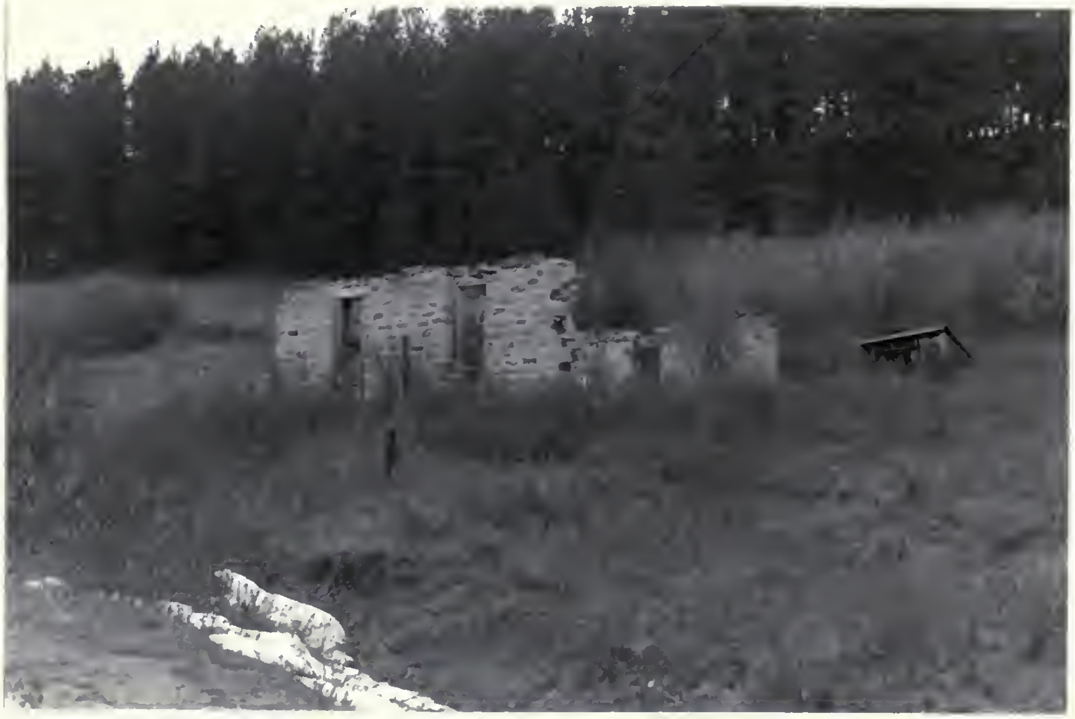


Feature 23 (view south).

Feature 24 (view west).

Feature 25 (view east).

Feature 28 and 29 (view west).



Features 30 and 31 (view northwest).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24JT150	1.2 Site name/field designation: Saager Canyon Mine Complex	1.3 County: Judith Basin

1.4 Township/range: see attached

T R 1/4 1/4 1/4 of Section

1.5 UTM: see attached

Zone____________ ______________ Easting ____________ Northing

1.6 Site type: coal mine	1.7 Recording status & comments: mapped, photographed and recorded

1.8 Administrative/surface ownership:

Section 20 and 21 - Colin Dover - Buffalo, MT
Section 16 - Esther Hart Shrewsbury Foster,
Lewistown, MT

1.9 Mineral ownership:

1.10 Project name:
Department of State Lands
Abandoned Mine Reclamation
Program

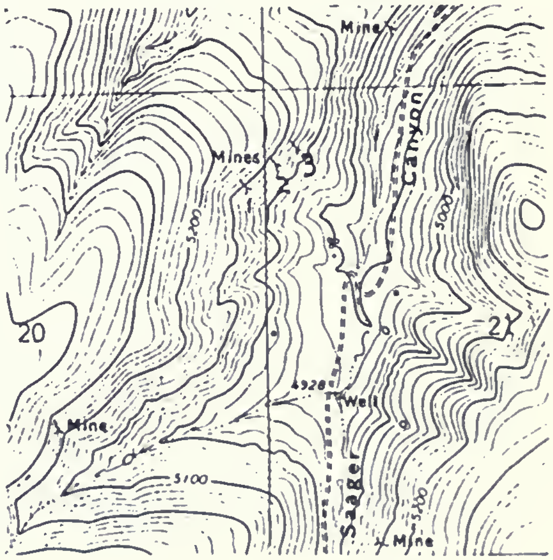
1.11 General narrative description of site:

The site complex consists of 27 adits located on the west and east faces of Saager Canyon. Associated with the adits are piles of coal spoil. There are no standing structures.

1.12 Map reference:
USGS 7.5 min quad - Martin Coulee, Mont. 1970

1.13 City/town: ☒ vicinity of
Buffalo

1.14 Access to site:
Drive west out of Buffalo on a gravel road for 6-1/2 miles. Here a ranch road intersects from the south. Follow this road for 3/4 miles. Here is the mouth of Saager Canyon. The mines begin here and extend 1-1/4 miles up the canyon.



D86P.3

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 2. Environmental Setting

Site number:

2.1 Geographic setting:

2.2 Elevation: 1560 m 5120 ft.

General: The site is in the foothills of the Little Belt Mountains.
Local: The site is in a ravine (U.S.G.S. calls it a canyon) that opens to the north.

2.3 View/aspect:
The view is limited to the area within the ravine.

2.4 Major drainage:
Buffalo Creek

2.5 Minor drainage(s):
The creek that drains Saager Canyon.

2.6 Water sources:

	Names	Distance	Ele. Change	Type & seasonality
a.	Saager Canyon Creeek	from 50 m to 200 m	18 m to 67 m	intermittent
b.				

2.7 Regional vegetation:
foothill grassland (Payne 1973)

2.8 Local vegetation:

fir, ponderosa pine, chokecherry, wild rose, buck brush, western wheatgrass, Timothy and brome

---

2.9 Soils:
brown loam

2.10 Surface visibility/season of survey:
good/winter

2.11 Other environmental factors pertaining to site location:

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24JT150

3.1 Condition of site: Destroyed.

3.2 Site significance (NRHP):
The site provided an excellent source of fuel for the local community. The fuel was used not only for domestic purposes but also for the local industry, i.e., farming. In this way the site mades significant contribution to the settlement of the Buffalo, Montana community. It meets Criterion A. However, since none of the structures are left at the site it has lost the majority of its integrity. The site is not recommended as eligible for listing on the NRHP.

3.3 Impacts:
The Department of State Lands plans to close the mine openings and either reclaim or remove coal waste areas.

3.4 Recommendations:
The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson	3.6 Site recorded by: Gene Munson	3.7 Revisions by:
Date: 3/12/87	Date: 3/12/87	Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:

Government Land Office Records 1923-1926 U.S. Department of Interior, Geologic Survey, Coal Mine serial pages. Burea of Land Management, Billings.

Calvert, W. R. 1909 Geology of the Lewistown Coal Field, Montana. Department of the Interior, United States Geological Survey, Bulletin 390.

Munson, Gene 1987 Cultural Resource Inventory and Evaluation of Selected Coal Mines and a Gold Mine near Lewistown, Montana for the Montana Department of State Lands. Prepared by Gene Munson, GCM Services, Inc., Butte, MT. Report No. 92-2-87.

Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.

3.10 Artifact repository:
N/A

3.11 Field notes/maps/photo repository:
GCM Services, Inc.
1003 S. Montana St.
Butte, Montana 59702

3.12 Photos & accession No:

No.	Description	View
26 and 26	Bloom Mine	NW
27 and 28	No Name Mines	E
29	Bloom & Williams Mines	W
30	John Olson Mine	W
31	Bachelor Mine	S
32	Saager Canyon Mine	S
34	Hollenbeck Mine 1	W
35	Hollenbeck Mine 2	E

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24JT150

5.1 Site dimensions, how determined:

The site is non-contiguous along the west and east sides of Saager Canyon. The following is a listing of each mine area. The mine area is determined by the area in which the features and artifacts are located.

Ben Hollenbeck Mine - There are two mine locations at the Ben Hollenbeck Mine; one is on the west side and the other is on the east side of Saager Canyon.
West side mine: 100 m NE/SW x 50 m NW/SE - 5000 m^2
East side mine: 50 m NS x 30 m E/W - 1500 m^2
Total 6500 m^2

Williams Mine - 100 m NE/SW x 50 m NW/SE - 5000 m^2
Bloom Mine - 200 m N/S x 50 m E/W -10,000 m^2
Chris Olson Mine - 30 m N/S x 20 m E/W 600 m^2
Saager Canyon Mine - 30 m N/S x 30 m E/W - 600 m^2
Bachelor Mine - 10 m N/S x 10 m E/W - 100 m^2
John Olson Mine - 30 m N/S x 30 m E/W - 90 m^2
No Name Mine - 200 m N/S x 50 m E/W - 1000 m^2

Total area 23,890 m^2

5.2 Features:

see attached

5.3 Artifacts (observed, collected):

see attached

5.4 Historical information and evaluation:

see attached

5.5 References
(See Section 3.9)

Bloom, Claude 1987 Personal communication, March 24, Lewistown, Montana.
Dover, Albert 1987 Personal communication, March 24, Lewistown, Montana.
Dover, Colin 1987 Personal communication, March 12 and 13, southwest of Buffalo, Montana.
Kuffler, Dorthy 1987 Personal communication, March 24, Carter, Montana.
McKinlay, Herald 1987 Personal communication, March 24, southest of Buffalo, Montana.

5.6 Subsurface testing, results, methods, etc.

none

1.4 Township/range: (continued)

T12N R14E

Hollenbeck Mine - S1/2 SW1/4 Section 16
Williams Mine - NW/14 NW1/4 Section 21
Bloom Mine - SE1/4 NE1/4 NE1/4, NE1/4 SE1/4 NE1/4 Section 20
Chris Olson Mine - SW1/4 NW1/4 SE1/4 Section 20
Saager Canyon Mine - SW1/4 SE1/4 SW1/4, Section 21
Bachelor Mine - NE1/4 SE1/4 SW1/4, Section 21
John Olson Mine - SW1/4 SW1/4 NE1/4 - Section 21
No Name Mine - E1/2 E1/2 NW1/4 Section 21

1.5 UTM: (continued)

Hollenbeck Mine	- 578600 Easting	5182800 Northing
	- 578850 Easting	5182750 Northing
Williams Mine	- 578250 Easting	5182450 Northing
Bloom Mine	- 578100 Easting	5182250 Northing
Chris Olson Mine	- 577500 Easting	5181500 Northing
Saager Canyon Mine	- 578600 Easting	5181080 Northing
Bachelor Mine	- 578850 Easting	5181020 Northing
John Olson Mine	- 539150 Easting	5181950 Northing
No Name Mine	- 579900 Easting	5182000 Northing

5.2 Features: (continued)

Hollenbeck Mine:

West side mine. There are four adits at the mine. Adit #3 is the only open adit (see sketch map). The piles of coal in front of the adits are relatively small; adit 1 having the largest pile which measures 15 m in lenth x 6 m in width and is 2 m high. The coal spoils at adits 3 and 4 have been burnt. Six upright posts in the coal spoil dump at adit 2 are the only remains of a tipple at the site.

Eastside Mine. There are two adits at the mine; both of which are collapsed. In front of the adits are small and somewhat diffuse piles of coal spoil. Vegetation covers most of the coal spoil.

Williams Mine. There are three adits at the mine. Adits 1 and 2 are open (see sketch map). Adit 1 has a small coal spoil dump in front of it. Adits 2 and 3 share the same coal spoil dump. This dump is 37 m long.

Bloom Mine. There are eight adits at this mine. All of which are closed. Each of the adits has a coal spoil dump in front of it. The largest coal spoil is at adits 1 and 2. The main dump measures 12 m x 8 m but coal is scattered downslope for at least 30 m.

Chris Olson Mine. The features at this mine consist of a collapsed adit and a small coal spoil dump.

Saager Canyon Mine. The features at the mine consist of an open adit and a small coal spoil dump that has been partially burnt.

Bachelor Mine. The features at the mine consist of an open adit, a small coal spoil dump and a few poles and boards that is the remains of a tipple.

Olson Mine. The features at the mine consist of one open adit (adit 1 on sketch map), two collapsed adits, a coal spoil dump in front of adits 2 and 3 and six upright posts which is all that remains of the tipple. The small amount of coal in front of adit 1 suggests that it was simply a prospect hole.

No Name Mine. The features consist of two collapsed (adits 1 and 3) and two open adits (adits 2 and 4) and coal spoil dumps. Since adit 1 is about 200 m north of adit 2 it probably is a separate mine. The small amount of coal spoil in front of this adit suggest that it was a prospect hole. At adit 2 there are the remains of a tipple which consists of a few posts. The road to the mine stops at adit 2. Adit 4 has no road to it and there is very little coal spoil in front of it suggesting it is a prospect hole. It is the only portal in the Saager Canyon Mine complex in which timbers were observed.

Hollenbeck Mine - The mine on the west side is the only one in which artifacts were observed. This consisted of broken bottle glass and a few tin cans.

Williams Mine - One piece of 8 lb. rail is the only artifact observed at the mine. This was in front of adit 3.

Bloom Mine - At adit 1 and 2 there are the remains of a coal chute made of tin in a wooden frame, part of a coal screen and cook stove remains. The coal screen consists of 3/4 in. pipe nailed onto 2 x 6 planks. The pipe was spaced 4 in. apart. A piece of 8 lb. rail is located on the coal spoil dump that is shared by adits 3 and 4.

Chris Olson - No artifacts were observed.

Saager Canyon Mine - There are the remains of two coal carts, fencing material, cans and boards.

Bachelor Mine - No artifacts were observed.

John Olson Mine - No artifacts were observed.

No Name Mine - No artifacts were observed.

5.4 Historical information and evaluation: Site No: 24JT150

Mining at the Saager Canyon Coal Mine complex started around 1900 and continued intermittently until the 1940s (Calvert 1908; Albert Dover 1987; Kuffler 1987; Bloom 1987; McKinely 1987). As a result of this coal mining activity Saager Canyon became known locally as Coal Mine Coulee.

The mines were small wagon mines selling coal to the local residents in the Buffalo community, to the railroad and to the local farmers for fuel for their stream tractors. The majority of the coal sales to the railroad occurred before 1920. With the introduction of stream tractors in the 1920s there was a new surge of coal mining activity (Albert Dover 1987).

The coal seam was generally around 30 inches thick but it was fairly uneven in thickness and not continuous which made mining difficult. It also had a tendency to pinch out. The mining technique was to have a main tunnel which was 4 ft. to 6 ft. high with side tunnels leading off of it. The side tunnels were the thickness of the coal seam so the miner had to be on his side while digging. The coal cars were pushed out by hand to the tipple. The mines at a maximum extended around 600 ft. into the hillside. The coal sold for $2.75 per ton unsorted and $3.00 per ton sorted (Albert Dover 1987; Bloom 1987).

The mines were generally named after the person who was currently mining at them. Over a period of several years one mine may have had several different operators resulting in the mine having several different names. The informants interviewed referred to the mines by the names of people that they could remember who worked at them or simply by location in the canyon. To add to the confusion of who mined at what mine is the factor that many of the local people would come and mine their winter's supply of coal (Colin Dover 1987). The following names given to the mines come from interviews with local informants, Calvert's (1909) publication on the Lewistown coal field, and coal mine records at the Bureau of Land Management records in Billings.

Hollenbeck Mines - The Ben Hollenbeck mines are located on the west and east side of Saager Canyon near its mouth in the SW1/4 of Section 16. Hollenbeck and Shrewsbury at one time jointly owned the land in which the mines were located. Hollenback probably was not the one who started the mines. They date to some time before 1912. From around 1912 to around 1920 they were shut down. Around 1920 Hollenbeck purchased two stream tractors. He reopened the mines and employed a miner to mine coal for his tractors in addition to selling coal to other local customers. There was a log cabin at the mine for the miner to live in. During the 1930s the Shrewsbury's who lived just north of the mine got coal from it for their own use (Albert Dover 1987; Kuffler 1987).

Williams Mine - The Williams mine is located on the west side of Saager Canyon in the NE1/4 NE1/4 Section 21. It is .3 km southwest of the Hollenbeck mine. B.B. Williams started the mine in the fall of 1906 making it one of the first mines in Saager Canyon. Calvert (1909) reported that in 1907 the entry was 165 ft into the hillside with a 30 in. coal seam.

Bloom Mine - The Bloom Mine is about 100 m southwest of the Williams Mine. John Olson, whose property the mine was on at that time, may have started it. The Bloom family were the last to mine it and were responsible for most of its development. They set up a tipple at adits 1 and 2 (see sketch map). It was fairly elaborate having several screens for size grading of the coal. They also built two houses near the tipple. The Blooms begain mining in 1932 and stopped mining in the early 1940s. This is the last mine to operate in Saager Canyon. After the mine closed, Albert Dover, who bought the property on which the mines are located, moved one of the houses and tore down the other house and tipple for lumber (Bloom 1987; Albert Dover 1987).

Chris Olson Mine - The Chris Olson mine is located on the west side of Saager Canyon in the NW1/4 SE1/4 of Section 20. It was mined by Chris Olson around the 1920s or before. It was a small mine that primarily provide coal for the Olson families (Albert Dover 1987).

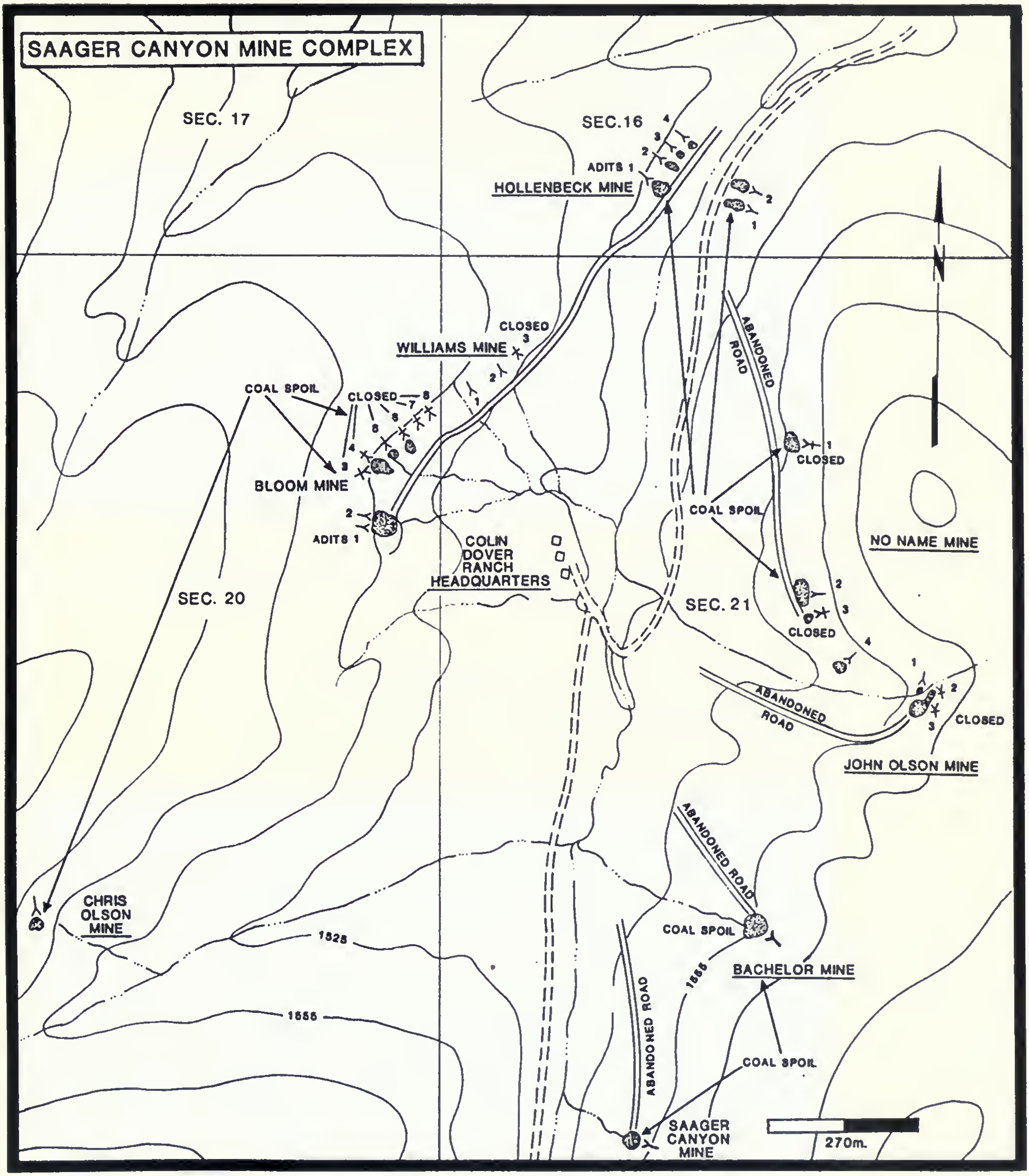
Saager Canyon Mine - This mine is located on the east side of Saager Canyon in the SW1/4 SW1/4 Section 21. This mine and the Williams Mine are two of the first mines in Saager Canyon. It was opened in the fall of 1906. Since the land in which the mine is located was unsubdivided, Calvert (1909) guessed that the mine was located in the NW1/4 NW1/4 of Section 28. He was fairly close since the mine is located just a few meters north of Section 28. The mine was owned by J. F. Lester, J. D. Kipe, E. E. Pearl, and William Gordon. In 1907 when Calvert (1909) visited the mine there was a drift of 85 feet in length and the coal seam was 4 ft. thick without a parting. Since the formation at the mine dips at 4° to the south, the entry extended upgrade (Calvert 1909).

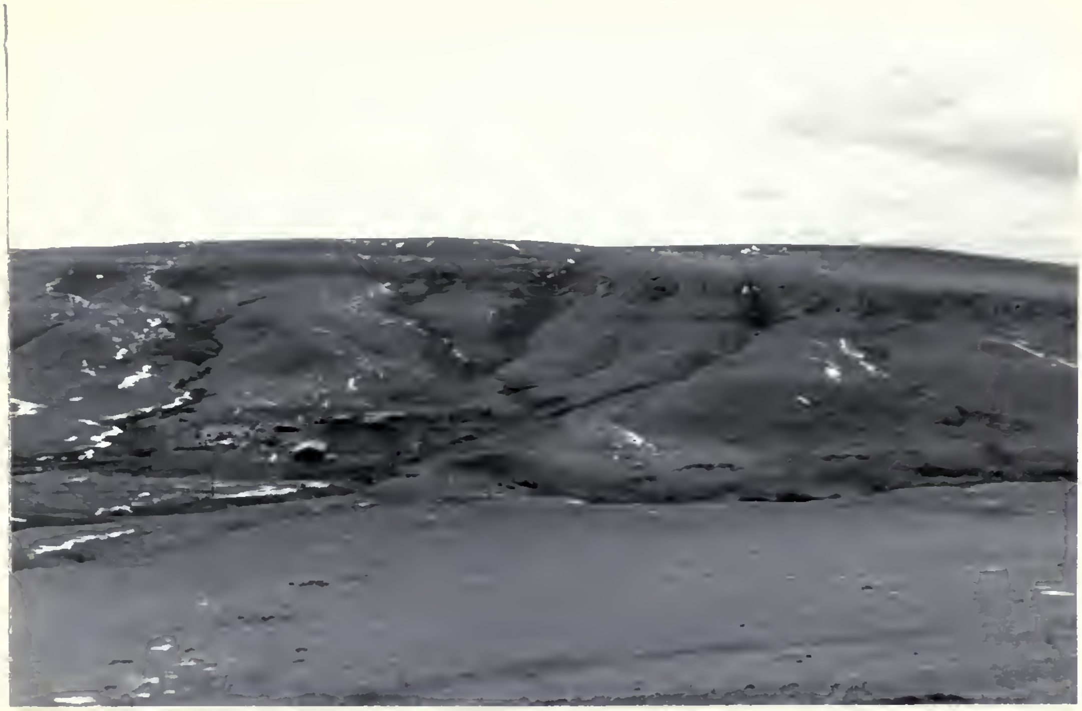
Bachelor Mine - This mine is located on the east side of Saager Canyon about 450 m north of the Saager Canyon mine. Albert Dover (1987) could not remember the names of the two bachelors who mined it. They lived in a small cabin below the mine. This mine operated around the 1920s.

John Olson Mine - This mine is located on the east side of Saager Canyon in a steep sided ravine. Based on the U.S.G.S. Martin Coulee, Mont. 7.5 min quadrangle map, the mine is in SW1/4, SW1/4, NE1/4 of Section 21. The government records show the mine as in the NE1/4 NE1/4 SW1/4 of Section 21. There is about 75 m descrepency. John Olson applied for a government coal lease in July of 1922 and received lease number Lewistown 046065 in January of 1924. The lease was for the SE1/4 NW1/4 and the NE1/4 SW1/4 Section 20. It was cancelled in August of 1926. From 1923 to 1925 a total of 753-3/4 tons of coal was mined (GLO Records).

During the 1920s and 1930s Lester and Oliver Crabtree and Nick Knoll mined at the mine. Of the mines in Saager Canyon this mine probably produced the most coal (Bloom 1987; Albert Dover 1987).

No Name Mines - In the E1/2 E1/2 NW1/4 of Section 21 on the east side of Saager Canyon are five adits. No specific information could be found on these mines. Calvert (1909) on Plate VII shows a prospect located in this area. A road up the face of the canyon was cut to adits 1, 2 and 3 (see sketch map). And at adit 2 there is a fair amount of coal spoil implying that some coal was hauled from the mine.


SAAGER CANYON MINE COMPLEX
SEC. 17
SEC.16
SEC. 20
SEC. 21
ADITS 1
2
3
4
HOLLENBECK MINE
2
1
CLOSED
3
WILLIAMS MINE
2
1
COAL SPOIL
CLOSED
8
7
6
5
4
3
BLOOM MINE
2
ADITS 1
COLIN
DOVER
RANCH
HEADQUARTERS
ABANDONED
ROAD
1
CLOSED
COAL SPOIL
NO NAME MINE
2
3
CLOSED
4
1
2
3
CLOSED
ABANDONED
ROAD
JOHN OLSON MINE
ABANDONED ROAD
CHRIS
OLSON
MINE
1525
1555
COAL SPOIL
1555
BACHELOR MINE
ABANDONED ROAD
COAL SPOIL
SAAGER
CANYON
MINE
270m.
N



Bloom and Williams Mines in the Saager Canyon Mine Complex (view west).

Hollenbeck Mine 1 in the Saager Canyon Mine Complex (view west).

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 1 Locational Information

1.1 Site number: 24JT151

1.2 Site name/field designation: Waite Creek Mine

1.3 County: Judith Basin

1.4 Township/range:

T 13N R 13E NE1/4 NE1/4 NW1/4 of Section 8

1.5 UTM:

Zone 12 568250 Easting 5195250 Northing

1.6 Site type: coal mine

1.7 Recording status & comments: mapped, photographed and recorded

1.8 Administrative/surface ownership:

Wertheimer Land Company, Utica

1.9 Mineral ownership:

1.10 Project name: Department of State Lands Abandoned Mine Reclamation Program

1.11 General narrative description of site:

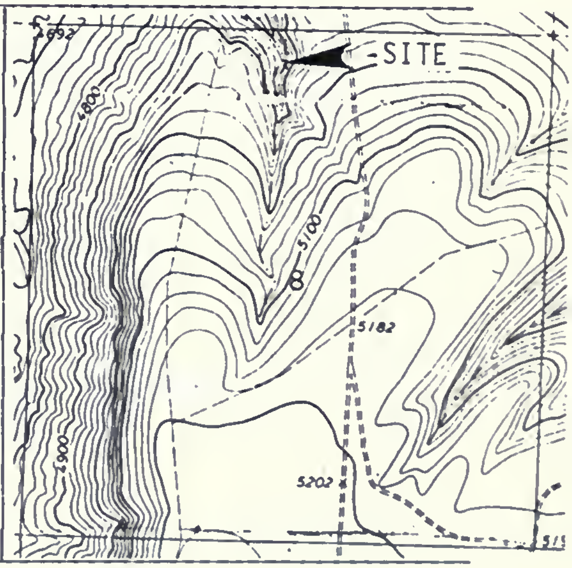
The site consists of one collapsed adit, one open adit and a small amount of coal spoil and a foundation for a small building.

1.12 Map reference: USGS Utica, Mont. 7.5 min quad (1970)

1.13 City/town: Utica, Montana ☒ vicinity of

1.14 Access to site:

Drive southwest out of Utica for 1/4 mile. Here the road forks. Take the south fork and follow it for one mile. Here the road makes a 90° turn to the east. Take a trail south, instead. Follow this trail for three miles. Stop and hike west for 250 m into a narrow ravine. Here is the location of the site.



D86P.2

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 3 Site Assessment and Recording Documentation

Site number: 24JT151

3.1 Condition of site: destroyed.

3.2 Site significance (NRHP):
The mine probably produced only a small amount of coal, therefore, contributing little to the local history. It does not meet any of the Criteria. The site is not recommended as eligible for listing on the NRHP.

3.3 Impacts:
The Department of State Lands plans to close the mine openings, and either reclaim or remove coal waste areas.

3.4 Recommendations:

The site has been recorded, mapped and photographed and no further work on the site is recommended.

3.5 Site located by: Gene Munson Date: 3/11/87	3.6 Site recorded by: Gene Munson Date: 3/11/87	3.7 Revisions by: Date:

3.8 Permit No.: N/A

3.9 Publications concerning site:
Munson, Gene 1987 A cultural resource inventory and evaluation of selected coal mines and a gold mine near Lewistown, Montana. For the Montana Department of State Lands. GCM Services, Inc., Butte. Report No. 92-2-87.
Payne, Gene F. 1973 Vegetative Rangeland Type in Montana. Montana Agricultural Experiment Station, Montana State University, Bozeman.
Taurman, Mildred (editor)
1968 Utica. Utica Historical Society. n.p.
Waite, Charles
1976 Utica. In Furrows and Trails in Judith Basin. n.p.

3.10 Artifact repository: N/A	3.11 Field notes/maps/photo repository: GCM Services, Inc. 1003 S. Montana St. Butte, MT 59702

3.12 Photos & accession No:

No.	Description	View
21	Mine 2 overview	E
22	Mine 1 overview	N
23	Mine 1 and 2 overview	S

MONTANA CULTURAL RESOURCE INVENTORY

Form No. 5. Description of Historic Sites

Site number: 24JT151

5.1 Site dimensions, how determined:
The site measures 90 m NW/SE x 20 m NE/SW. This is the area in which the adits, coal spoil and feature are located.

1800 m^2

5.2 Features:
The features consist of one collapsed adit (Mine 1), one open adit (Mine 2), coal spoil in front of each adit and a small building foundation (Feature 1). The coal spoil is heavily vegetated over and appears to be quite thin. Feature 1, located at Mine 1 consists of a leveled off place measuring 2.5 m x 2.5 m with a sandstone rubble wall 2.5 m long x 1 m high. The rubble is random coursed.

5.3 Artifacts (observed, collected):
None observed.

5.4 Historical information and evaluation:
The mine was operated around 1900. However, none of the local informants could remember the name of the person who operated the mine. Because of this mine and coal outcroppings along the bluffs above Waite Creek, the long-time residents around Utica referred to the creek as Coal Bank Coulee. This is one of two coal bank coulees in the area. The other is northwest of Utica and is still referred to by this name (Raymond Swanz 1987; Tom Swanz 1987; Taurman 1987).

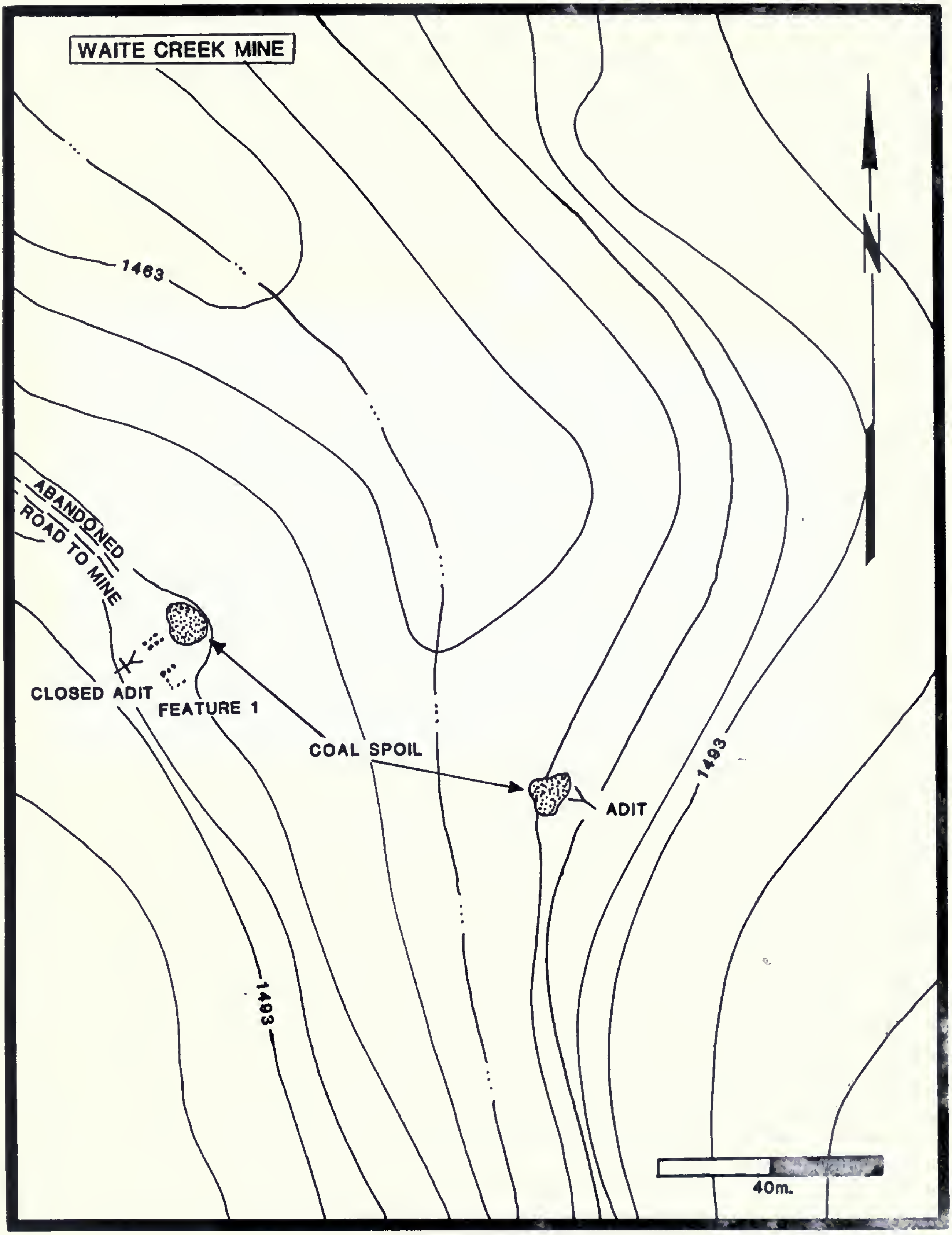
The local histories (Waite 1976; Taurman, editor 1968) and the records at the Bureau of Land Management in Billings, Montana were checked for further information but nothing was found.

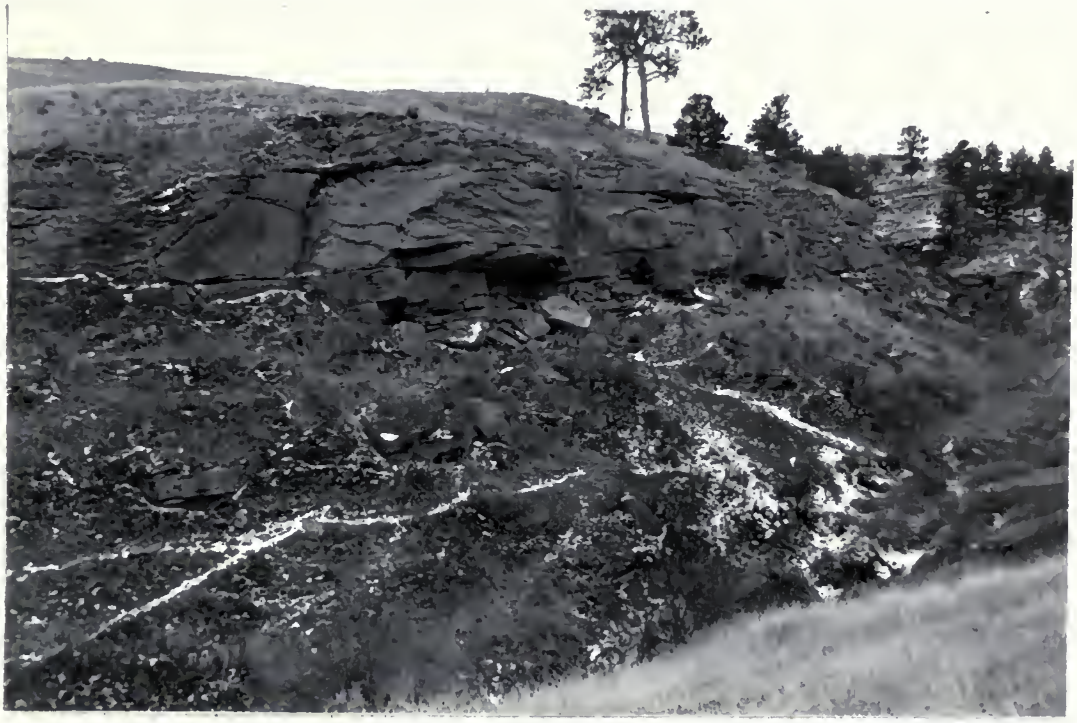
5.5 References
(See Section 3.9)

Swanz, Raymond
1987 Personal communication, April 11, Hopson.
Swanz, Tom
1987 Personal communication, April 11, Utica.
Taurman, Mildred
1987 Personal communication, March 28, Utica.

5.6 Subsurface testing, results, methods, etc.

None


WAITE CREEK MINE
N
1463
ABANDONED ROAD TO MINE
CLOSED ADIT
FEATURE 1
COAL SPOIL
ADIT
1493
1493
40m.



Waite Creek Mine (view east)